License Application for sustainable hand-harvesting of *Ascophyllum nodosum* in Kenmare Bay.

Appendix 11:

Assessment of compatibility with MSP policies and activities in Kenmare Bay.

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Table of Contents

1. Abbreviations:

- **AA:** Appropriate Assessment.
- **EIA:** Environmental Impact Assessment.
- **LSEs:** Likely significant impacts/effects.
- **M:** Meters.
- **MSP:** Marine Spatial Planning.
- **N/A:** Not applicable.
- **NIS:** Natura Impact Statement.
- **NMPF:** National Marine Planning Framework.
- **NPP:** Global Net Primary Production.
- **ORE:** Offshore renewable energy.
- **OREDP:** Offshore Renewable Energy Development Plan.
- **SAR:** Search and Rescue.
- **SCA9**: Seascape character assessment 9.
- **SEA:** Strategic Environmental Assessment.

2. Introduction:

The aim of this assessment was to identify any potential effects or interactions of *A. nodosum* harvesting on activities and relevant policies for each marine sector or activity listed in the National Marine Planning Framework (NMPF). This includes Environmental, Economic and Social sections of the NMPF's Overarching Marine Planning Policies. The assessment was focused primarily on data contained on the MarinePlan.ie web map portal, Ireland's first Marine Spatial Planning (MSP) portal. This includes an assessment of the potential for likely significant impacts/effects and direct or indirect, in combination, cumulative effects. Where relevant, the document refers to information contained in the other documents and risk assessments contained in this application, including Appendix 5, 6, 7 and 10 and the Code of Practice in Appendix 4.

3. Statement of consistency with the NMPF.

This application to sustainably hand harvest *A. nodosum* in Kenmare River SAC is consistent with the objectives of the NMPF. This includes spatially specific policies relevant to Kenmare River SAC and plan areas policies for the marine sector. In addition, the application is consistent with marine activities in Kenmare River SAC. Measures are in place to ensure that harvesting activities do not impact directly or indirectly with other activities in Kenmare River SAC, and that no cumulative or in-combination effects arise. The associated Natura Impact Statement and application documents further demonstrate that BioAtlantis' plan ensures that harvesting is undertaken in line with conservation objectives, to ensure no negative impacts on Annex I and Annex II marine and coastal habitats and species in Kenmare River SAC. Supporting Information for Screening for Appropriate Assessment and a Risk Assessment for Annex IV Species has also been provided. Seaweed harvesting is listed as a Key Sectoral/Activity Policy. BioAtlantis' application is consistent with the NMPF's aims to support the sustainable harvesting of seaweed given its important economic and social contribution. BioAtlantis' application is in line with sustainable objectives as it ensures that seaweed is harvested on a sustainable and renewable basis and that mitigation measures are employed where necessary to prevent impacts (see Code of Practice, Appendix 4 of application). In addition, this application does not interfere with or prevent those with existing appurtenant rights to harvest seaweed or those who obtain Profit a Prendre rights into the future. This application also aligns with other Government plans, including The National Bioeconomy Action Plan 2023-2025.

4. Overview of potential impacts and mitigation:

This section provides an overview of potential impacts on proposed maritime usage and mitigation, with respect to the following:

- Planning & Development.
- Land & Soils
- Water
- Biodiversity
- Fisheries and Aquaculture
- Air Quality
- Noise & Vibration
- Landscape/Seascape
- Traffic & Transport (including navigation)
- Cultural Heritage (including underwater archaeology)
- Population & Human Health
- Major Accidents & Disasters
- Climate
- Waste
- Material Assets

Further analysis of consistency with the NMPF, Spatially Specific Policies, Plan area policies and Marine activities, are outlined in the next section.

(a) Planning & Development

- **Planning and Development:** This application does not involve any Planning and Development activities. This application relates to the harvesting of seaweed, a human activity which takes place on the foreshore. Seaweed harvesting does not represent a 'Development' within the meaning of the Planning and Development Act, nor does it represent a project type for purposes of the EIA Directive. Planning permission is not required for this activity.
- **Impacts on planning and development in the area:** There will be no impacts on planning and development in the area. In addition, there will be no cumulative and in-combination effects with existing or planned developments or activities in the areas. See Appendix 7 to this application for details: *"Assessment of cumulative and in-combination effects associated with harvesting A. nodosum in Kenmare River SAC"*.

No potential impacts have been identified in relation to the NMPF and MSP policies, in relation to planning and development. This proposal is unlikely to give rise to likely significant impacts/effects (LSEs).

(b) Land & Soils

No potential impacts have been identified in relation to the NMPF and MSP policies, in relation to land or soil. This proposal is unlikely to give rise to LSEs.

(c) Water

Hand harvesting of *A. nodosum* will not impact on Water Quality Policy 1 or 2. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: Measures are in place to ensure that hand harvesting activities are sustainable. See Appendix 4, Code of Practice, for measures to ensure that harvesting does not occur in the vicinity of sewage outfalls, and that direct, indirect, cumulative or in-combination effects do not occur.

(d) Biodiversity

Spatially Specific Policies and Plan area policies:

This application will not adversely impact on biodiversity policies listed in the National Marine Planning Framework (NMPF) and Marine Spatial Planning (MSP) policies. The application is unlikely to give rise to likely significant impacts/effects LSE, directly or indirectly. Cumulative impacts and/or in combination effects are unlikely to occur. Hand harvesting of *A. nodosum* is compatible with biodiversity policies as follows:

- **Biodiversity policy 1:** Hand harvesting of *A. nodosum* will not adversely impact on species adaptation or migration, or on natural native habitat connectivity.
- **Biodiversity policy 2:** Hand harvesting of *A. nodosum* will adversely impact on biodiversity policies and will not impact the distribution and net extent of important habitats and other habitats that important species depend on. The proposal will not lead to disturbance or displacement of habitats.
- **Biodiversity policy 3:** Hand harvesting of *A. nodosum* will not adversely impact on biodiversity policies and will not impact on marine or coastal natural capital assets.
- **Biodiversity policy 4:** Hand harvesting of *A. nodosum* will not adversely impact on biodiversity policies and will not give rise to disturbance to, or displacement of, highly mobile species.
- **Environmental – Ocean Health Policy 1:** This application aligns with and is compatible with NMPF policies in relation to Biodiversity. This is outlined in Appendix 5 and Appendix 7. This application will not adversely impact on Environmental – Ocean Health Policy 1 and the likelihood of giving rise to likely significant impacts/effects (LSEs) is low. In combination or cumulative effects are unlikely to occur.

Control Measures: Measures are in place to ensure that hand harvesting activities are sustainable and do not directly or indirectly negatively impact on NMPF policies and that no cumulative or in-combination effects arise. See Appendix 4, Code of Practice, and the Natura Impact Statement (NIS) for details.

Marine activities/Activities Map: See biodiversity policies 1, 2, 3 and 4 above.

The above information is outlined in further detail in the assessments in Appendix 5, Appendix 7 and Appendix 11, and the Code of practice in Appendix 4.

(e) Fisheries and Aquaculture

(i) Aquaculture:

Spatially Specific Policies and Plan area policies:
This application will not adversely impact on aquaculture policies listed in the NMPF and MSP policies (including Spatially Specific Policies and Plan area policies). The application is unlikely to give rise to likely significant impacts/effects LSE, directly or indirectly. Cumulative impacts and/or in combination effects are unlikely to occur. Hand harvesting of *A. nodosum* is compatible with aquaculture policies as follows:

- **Aquaculture policy 1 & 2:** Hand harvesting of *A. nodosum* will not involve or impact on aquaculture and is compatible with aquaculture production as there is no spatial overlap between both activities. This is outlined in the assessment in Appendix 7.

- **Aquaculture policy 3:** Hand harvesting of *A. nodosum* will not involve or impact on land based coastal infrastructure critical to and supporting aquaculture.

Marine activities/Activities Map:

- **Aquaculture:** no impacts
- **Licensed sites:** See aquaculture policies 1, 2 and 3 above.
- **Shellfish water directive:** *A. nodosum* harvesting will not give rise to negative effects on physical, chemical and microbiological parameters of relevance or pollution reduction programs for designated waters in Kenmare River SAC (this is outlined further in the assessments in Appendix 5 and Appendix 7). In combination or cumulative effects are unlikely to occur. The likelihood of giving rise to LSEs in this application is low.
- **Bivalve production areas:** According to the Marine Institute:
  - The likely overlap between these activities [intertidal seaweed harvesting] and intertidal shellfish culture is considered small as the (reef) habitat is not considered suitable for shellfish culture and low levels of this culture method overlaps this habitat… The level of transport across the intertidal area is unknown, but it is presumed that the routes are well defined Marine Institute (2019).
  - Hand harvest activities may exacerbate existing effects which are potentially associated with licensed aquaculture activities, e.g. disturbance at sites relevant to harbour seals. Overall the risk of such interactions is considered low (Marine Institute, 2014).

  This is outlined further in Appendix 5 and Appendix 7. In combination or cumulative effects are unlikely to occur. The likelihood of giving rise to LSEs in this application is low.

Control Measures: Measures are in place to ensure that hand harvesting does not impact on bivalve production areas or aquaculture, either directly or indirectly, and that no cumulative or in combination effects occur (see Appendix 4, Code of Practice). The above information is outlined in further detail in the assessments in Appendix 5, Appendix 7 and Appendix 11, and the Code of practice in Appendix 4.

(ii)Fisheries:

Spatially Specific Policies and Plan area policies:
This application will not adversely impact on fisheries policies listed in the NMPF and Marine Spatial Planning (MSP) policies (including Spatially Specific Policies and Plan area policies). The application is unlikely to give rise to likely significant impacts/effects LSE, directly or indirectly. Cumulative impacts and/or in combination effects are unlikely to occur. Hand harvesting of *A. nodosum* is compatible with fisheries policies as follows:

- **Fisheries Policy 1:** Hand harvesting of *A. nodosum* is compatible with fishing activities. This is outlined in the assessment in Appendix 5, Appendix 10 and also in the following sections of Appendix 7:
  - Table 3b: Impact at sites relevant to angling and fishing.
  - Table 3(a), point 37: Fishing and angling- sea.
  - Table 3(a), point 38: Fishing and angling- freshwater.
  - Table 3(c): Charter boat activities.
  - Table 6: point 2: Kenmare Bay fisheries.
  - Section 3(c): Fishing and Fisheries.
- **Fisheries Policy 2, 3, 4 and 6:** As above for access Fisheries policy 1. This application will not adversely impact on fish, fisheries or fishing activities and the likelihood of giving rise to LSEs in this application is low. In combination or cumulative effects are unlikely to occur.

- **Fisheries Policy 5:** As above for access Fisheries policy 1. This application will not adversely impact on fish, fisheries or fishing activities and the likelihood of giving rise to LSEs in this application is low. In particular, see Appendix 10 for details in relation the distribution, spawning areas, nursery areas, food sources and fish and shellfish species. In combination or cumulative effects are unlikely to occur.

Control Measures: Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly on fish, fisheries or fishing activities, and that no in-combination effects arise (see Appendix 4, Code of Practice).

Marine activities/Activities Map:

- **Fisheries – effort:** See Fisheries Policy 1 to 6 above.
- **Beam trawl fishing effort:** limited to subtidal areas/community types where *A. nodosum* does not grow. There is no spatial overlap between Beam trawl fishing effort and intertidal reef community complex and no spatial overlap between hand harvesting and Beam trawl fishing effort. In combination or cumulative effects are unlikely to occur. See Fisheries Policies 1 to 6 above for details. The likelihood of giving rise to LSEs in this application is low.
- **Dredge trawl fishing effort:** limited to subtidal areas/community types where *A. nodosum* does not grow. There is no spatial overlap between dredge trawl fishing and intertidal reef community complex and no spatial overlap between hand harvesting and dredge trawl fishing. In combination or cumulative effects are unlikely to occur. See Fisheries Policies 1 to 6 above and Appendix 7 for details. The likelihood of giving rise to LSEs in this application is low.
- **Pelagic trawl effort**: limited to subtidal areas/community types where *A. nodosum* does not grow. There is no spatial overlap between Pelagic trawl and intertidal reef community complex and no spatial overlap between hand harvesting and Pelagic trawl. In combination or cumulative effects are unlikely to occur. See Fisheries Policies 1 to 6 above and Appendix 7 for details. The likelihood of giving rise to LSEs in this application is low.
- **Long line**: limited to subtidal areas/community types where *A. nodosum* does not grow. There is no spatial overlap between Long line effort and intertidal reef community complex and no spatial overlap between hand harvesting and Long line effort. In combination or cumulative effects are unlikely to occur. See Fisheries Policies 1 to 6 above and Appendix 7 for details. The likelihood of giving rise to LSEs in this application is low.
- **Pot fishing effort:** limited to areas/community types where *A. nodosum* does not grow. There is no spatial overlap between Pot fishing and intertidal reef community complex and no spatial overlap between hand harvesting and Pot fishing:
  - Potting for shrimp: Occurs throughout the mid to inner regions of the bay, limited to subtidal areas/community types where *A. nodosum* does not grow (there is no spatial overlap with intertidal reef community complex).
  - Potting for prawns: Occurs throughout the mid to inner regions of the bay, limited to subtidal areas/community types where *A. nodosum* does not grow (there is no spatial overlap with intertidal reef community complex).
  - Potting for crab and lobster: Occurs throughout the mid to inner regions of the bay, limited to subtidal areas/community types where *A. nodosum* does not grow (there is no spatial overlap with intertidal reef community complex).

  In combination or cumulative effects between hand harvesting and above activities are unlikely to occur. See Fisheries Policies 1 to 6 above and Appendix 7 for details. The likelihood of giving rise to LSEs in this application is low.
- **Seines fishing effort:** limited to subtidal areas/community types where *A. nodosum* does not grow. There is no spatial overlap between Seines fishing effort and intertidal reef community complex and no spatial overlap between hand harvesting and Seines fishing effort. In

combination or cumulative effects are unlikely to occur. See Fisheries Policies 1 to 6 above and Appendix 7 for details. The likelihood of giving rise to LSEs in this application is low.

- **Gill net effort:** limited to subtidal areas/community types where *A. nodosum* does not grow. There is no spatial overlap between Gill net effort and intertidal reef community complex and no spatial overlap between hand harvesting and Gill net effort. In combination or cumulative effects are unlikely to occur. See Fisheries Policies 1 to 6 above and Appendix 7 for details. The likelihood of giving rise to LSEs in this application is low.
- **Otter trawl effort:** limited to subtidal areas/community types where *A. nodosum* does not grow. There is no spatial overlap between Otter trawl effort and intertidal reef community complex and no spatial overlap between hand harvesting and Otter trawl effort. In combination or cumulative effects are unlikely to occur. See Fisheries Policies 1 to 6 above and Appendix 7 for details. The likelihood of giving rise to LSEs in this application is low.
- **Megrim spawning and nursery grounds:** Hand harvesting of *A. nodosum* is unlikely to affect Megrim spawning and nursery grounds, which occur in deep, subtidal offshore waters (see Appendix 10). Megrim does not have an obligate relationship with *A. nodosum*:
  - Distribution: Megrim is found between 100-700m.
  - Spawning Areas: *A. nodosum* is not a spawning ground.
  - Nursery Areas: *A. nodosum* is not a nursery ground.
  - Food source: Megrim occupies deep waters.

  In combination or cumulative effects are unlikely to occur. The likelihood of giving rise to LSEs in this application is low.
- **Whiting spawning and nursery grounds:** Hand harvesting of *A. nodosum* is unlikely to affect whiting spawning and nursery grounds (see Appendix 10). Whiting does not have an obligate relationship with *A. nodosum*:
  - Distribution: Whiting is found between 0-100m.
  - Spawning Areas: *A. nodosum* is not a spawning ground.
  - Nursery Areas: The nursery ground is broad and preference is shown for sand and mud substratum. Larvae are observed offshore.
  - Food source: Whiting has a wide distribution including deep waters of >30m. Whiting is usually found near mud and gravel bottoms, but also above sand and rock. Juveniles mainly occupy waters with sand and mud substratum.

  In combination or cumulative effects are unlikely to occur. The likelihood of giving rise to LSEs in this application is low.
- **Cod spawning and nursery grounds:** Hand harvesting of *A. nodosum* is unlikely to affect Cod spawning and nursery grounds (see Appendix 10). Cod does not have an obligate relationship with *A. nodosum* and utilizes a range of non-*A. nodosum* habitats:
  - Distribution: Cod is found from the shoreline down to depths of 600m.
  - Spawning Area: Spawning is pelagic and takes place offshore. The spawning areas of cod are not located in Kenmare Bay.
  - Nursery Area:
    - The main nursery areas in Ireland are in southeastern and northeast regions.
    - Nursery area are broad and includes gravel, pebbles, cobble, maerl, seagrass beds and rocky shores.
    - Juvenile cod are most abundant in shallow, sheltered areas where the seabed is composed of gravel and pebbles that contain maerl.
    - Juvenile cod show preference and occur at higher levels in gravel/pebble areas with maerl compared to boulder/cobble substrate containing algae.
  - Food source: Juvenile cod feed on plankton which is not restricted to the intertidal zone.

  In combination or cumulative effects are unlikely to occur. The likelihood of giving rise to LSEs in this application is low.

- **Atlantic haddock spawning and nursery grounds:** Hand harvesting of *A. nodosum* is unlikely to affect Atlantic haddock spawning and nursery grounds (see Appendix 10). Atlantic haddock does not have an obligate relationship with *A. nodosum*:
  - Distribution: Atlantic haddock is found at depths ranging from 10m to 450 m.
  - Spawning Area: *A. nodosum* is not a spawning ground. The spawning areas for haddock are not located in Kenmare Bay. Haddock remains in deep water to spawn, usually in depths of 75-200m.
  - Nursery Area: The nursery areas for haddock are not located in Kenmare Bay. Juvenile haddock occupy waters with sand and mud substratum.
  - Food source: *A. nodosum* is not a feeding area.

  In combination or cumulative effects are unlikely to occur. The likelihood of giving rise to LSEs in this application is low.
- **Atlantic mackerel spawning and nursery grounds:** Hand harvesting of *A. nodosum* is unlikely to affect Atlantic mackerel spawning and nursery grounds (see Appendix 10). Atlantic mackerel does not have an obligate relationship with *A. nodosum*:
  - Distribution: Atlantic mackerel is a deep water fish ranging from shallow water to ~1000m.
  - Spawning Areas: *A. nodosum* is not a spawning ground. Eggs are pelagic, floating freely in the water column.
  - Nursery Areas: *A. nodosum* is not a nursery ground. Nursery is shallow open water.
  - Food source: *A. nodosum* is not a feeding ground. Mackerel have a varied diet and do not feed exclusively in intertidal areas.

  In combination or cumulative effects are unlikely to occur. The likelihood of giving rise to LSEs in this application is low.
- **Horse mackerel spawning and nursery grounds:** Hand harvesting of *A. nodosum* is unlikely to affect Horse mackerel spawning and nursery grounds (see Appendix 10). Horse mackerel does not have an obligate relationship with *A. nodosum*:
  - Distribution: Horse mackerel is found from shallow water areas to over 200m.
  - Spawning Areas: *A. nodosum* is not a spawning ground. Spawning area is not located in Kenmare Bay, and is located off the coast.
  - Nursery Areas: *A. nodosum* is not a nursery ground. Nurseries are observed to be widespread around Ireland and not localised to Kenmare Bay.
  - Food source: *A. nodosum* is not a feeding ground. Mackerel have a varied diet and do not feed exclusively in *A. nodosum* areas.

  In combination or cumulative effects are unlikely to occur. The likelihood of giving rise to LSEs in this application is low.
- **Atlantic hake spawning and nursery grounds:** Hand harvesting of *A. nodosum* is unlikely to affect Atlantic hake spawning and nursery grounds (see Appendix 10). Atlantic hake does not have an obligate relationship with *A. nodosum*:
  - Distribution: Atlantic hake is found between 75-400m.
  - Spawning Area: *A. nodosum* is not a spawning ground. Spawning areas are not located in Kenmare Bay.
  - Nursery Area: *A. nodosum* is not a nursery ground.
  - Food source: *A. nodosum* is not a feeding ground.

  In combination or cumulative effects are unlikely to occur. The likelihood of giving rise to LSEs in this application is low.
- **White belly angler monk nursery grounds:** Hand harvesting of *A. nodosum* is unlikely to affect Anglerfish/ monkfish spawning and nursery grounds (see Appendix 10). Anglerfish/ monkfish does not have an obligate relationship with *A. nodosum*:
  - Distribution: Found between 20-1000m.
  - Spawning Areas: *A. nodosum* is not a spawning ground

  - Nursery Areas: *A. nodosum* is not a nursery ground. Nursery grounds are located along the outer reaches of Kenmare Bay and extend into deeper waters. Juveniles occur in shallow (<30m) and deep waters (>30m).
  - Food source: Feeds on fish and birds.

  In combination or cumulative effects are unlikely to occur. The likelihood of giving rise to LSEs in this application is low.
- **Black belly angler monk nursery grounds:** Hand harvesting of *A. nodosum* is unlikely to affect Black-bellied anglerfish spawning and nursery grounds (see Appendix 10). Black-bellied anglerfish does not have an obligate relationship with *A. nodosum*:
  - Distribution: Deep water fish ranging from shallow waters to 650m.
  - Spawning Areas: *A. nodosum* is not a spawning ground.
  - Nursery Areas: *A. nodosum* is not a nursery ground. Nursery grounds are located in deeper waters beyond Kenmare River SAC. Juveniles occur in subtidal waters (>30m) with subtidal soft bottom and gravel coarse bottom.
  - Food source: *A. nodosum* is not a feeding ground. Black-bellied angler fish have a varied diet.

  In combination or cumulative effects are unlikely to occur. The likelihood of giving rise to LSEs in this application is low.
- **Blue whiting spawning and nursery grounds:** Hand harvesting of *A. nodosum* is unlikely to affect Blue whiting spawning and nursery grounds (see Appendix 10). Blue whiting does not have an obligate relationship with *A. nodosum*:
  - Distribution: Found between 150-1000m.
  - Spawning Area: *A. nodosum* is not a spawning ground. Spawning areas are not located in Kenmare Bay. Spawning occurs at depths of 180m to 360m.
  - Nursery Area: *A. nodosum* is not a nursery ground. The blue whiting nursery areas are not located in Kenmare Bay.
  - Food source: Diet is varied and includes species in deep waters beyond the intertidal zone.

  In combination or cumulative effects are unlikely to occur. The likelihood of giving rise to LSEs in this application is low.
- **Fisheries - Ports, harvesting, distribution:** Hand harvesting of *A. nodosum* will not impact on Ports, Harbours and Shipping Policy 1. No fishing ports are located in the proposed license area. In combination or cumulative effects are unlikely to occur. The likelihood of giving rise to LSEs in this application is low.

Control Measures: Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice). The above information is outlined in further detail in the assessments in Appendix 5, Appendix 7, Appendix 10 and Appendix 11, and the Code of practice in Appendix 4.

(f) Air Quality

- **Air Quality Policy 1 & 2**: Hand harvesting of *A. nodosum* will not impact on air quality or air quality monitoring. In combination or cumulative effects are unlikely to occur. The likelihood of giving rise to LSEs in this application is low.

Control Measures: Mitigation not required.

The above information is outlined in Appendix 7 and Appendix 11.

(g) Noise & Vibration

Spatially Specific Policies and Plan area policies:

- **Environmental – Ocean Health Policy 1:** This application aligns with and is compatible with NMPF policies in relation to Underwater Noise. This application will not adversely impact on Environmental – Ocean Health Policy 1 and the likelihood of giving rise to LSEs in this application is low. In combination or cumulative effects are unlikely to occur. Control Measures: Measures are in place to ensure that hand harvesting activities are sustainable and do not directly or indirectly negatively impact on NMPF policies and that no cumulative or in-combination effects arise. See Appendix 4, Code of Practice, and the Natura Impact Statement (NIS) for details.
- **Underwater Noise Policy 1:** This application aligns with and is compatible with NMPF policies in relation to Underwater Noise. This application will not adversely impact on Underwater Noise Policy 1 and the likelihood of giving rise to LSEs in this application is low. In combination or cumulative effects are unlikely to occur. Control Measures: Measures are in place to ensure that hand harvesting activities are sustainable and do not negatively impact on NMPF policies and that direct, indirect, cumulative or in-combination effects do not occur. See Appendix 4, Code of Practice, and the Natura Impact Statement (NIS) for details.

Control Measures: Mitigation not required. However, measures are in place in the Code of Practice to ensure that noise is kept to a minimum (e.g. revving engines or shouting must be avoided).

The above information is outlined in Appendix 5, 7 and Appendix 11.

(h) Landscape/Seascape

Spatially Specific Policies and Plan area policies:

- **Seascape and Landscape Policy 1:**
  - This application aligns with and is compatible with NMPF policies in relation to Seascape and Landscape. This application will not adversely impact on Seascape and Landscape Policy 1 given the use of the traditional harvesting methods involved, and the likelihood of giving rise to LSEs in this application is low. In combination or cumulative effects are unlikely to occur.
  - Seascape character assessment 9 (SCA9) comprises an indented coastline of counties Kerry and Cork, including; Dingle, Iveragh, Beara, Sheep's Head and Mizen, and their intervening bays; Dingle Bay, Kenmare Bay (River), Bantry Bay, Dunmanus Bay and Roaringwater Bay (ref: Marine Institute (2020). SCA9 is considered to be dense (particularly around the Kenmare river) in licensed aquaculture sites (shellfish, finfish and seaweed), and businesses operators involved in providing angling tours (Kenmare Fishing Tours, The ROSA Sea Fishing and Scenic Tours). Given the sustainable nature of hand harvesting and the traditional methods employed, there will be no impacts on Regional Seascape Character Areas such as "SCA9 - Atlantic South West Rias, Bays and Islands" and it's aspects (including: boundaries and location, key characteristics, natural influences, cultural and social influences, art and folklore, perceptual influences vistas and views, sense of place, sounds and smells).
  - Control Measures: Measures are in place to ensure that hand harvesting activities are sustainable and do not directly or indirectly negatively impact on NMPF policies and that no cumulative or in-combination effects arise. See Appendix 4, Code of Practice, and the Natura Impact Statement (NIS) for details.

Marine activities/Activities Map:

- **Seascape and landscape:**
  - Seascape coastal type.
  - Seascape character area.

The likelihood of giving rise to impacts on seascape, landscape and visual disturbance is very low as (a) hand harvesting of seaweed is not novel and has a long established tradition along the west coast of Ireland (b) harvesting will take place on a sustainable basis and (c) measures are in place to prevent interactions between harvesting and recreation, sport and tourism-related activities. In addition, no infrastructure is involved in this application. This is outlined in the assessments in Appendix 5 and Appendix 7. The likelihood of giving rise to LSEs in this application is low. In combination or cumulative effects are unlikely to occur. As above, there will be no impacts on Regional Seascape Character Areas such as "SCA9 - Atlantic South West Rias, Bays and Islands" and it's aspects.

(i) Traffic and Transport (including navigation)

Spatially Specific Policies:

- **Ports, Harbours and Shipping Policy 4:** Hand harvesting of *A. nodosum* will not adversely impact on ports. In addition, harvesting will not adversely impact on piers, quays, harbours or navigation within the maritime area (see Appendix 7: Table 3(a), Point 39 and Table 7(a), Point 78). In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs.

  Control Measures: Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly on piers, quays, harbours or navigation within the maritime area, and that no in-combination effects arise. See Appendix 4, Code of Practice, and the following sections contained therein:
  - Navigation to harvest sites (Section 3.4).
  - Prevent interactions (Section 3.14).
  - Environmentally safe navigation (Section 7).
  - Tourism, sport and recreation (Section 8).

Plan area policies:

- **Defence and Security Policy 1:** Hand harvesting of *A. nodosum* will not impact Defence and Security. Harvesting will not take place near danger and restricted areas that coincide with marine or coastal areas (areas identified by the Irish Aviation Authority) or naval bases (i.e. Haulbowline Naval Base). In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: Mitigation not required.
- **Ports, Harbours and Shipping Policies 1 - 10:** Hand harvesting of *A. nodosum* will not impact on Ports, Harbours and Shipping Policies 1-10. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: Mitigation not required.
- **Safety at Sea Policies 1 - 5:** This application to hand harvest *A. nodosum* ensures H&S requirements are adhered to. This is outlined in the assessment in Appendix 5. This proposal will not affect Safety at Sea Policies 1 to 5 is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. Control Measures: See Appendix 4 (Code of Practice) for measures to ensure the sustainability of harvesting activities, adherence to H&S measures and measures to ensure that direct, indirect, cumulative or in-combination effects do not occur.
- **Sport and Recreation Policies 1 to 5:** Hand harvesting of *A. nodosum* is compatible with and will not impact on tourism, sport, recreation, sailing, pleasure craft or recreational vessels. This application will not adversely impact on sport and recreation and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. Control Measures: Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly with tourism, sport and recreation, and that no cumulative or in-combination effects arise (see Appendix 4).

Marine activities/Activities Map:

Ports, harbours and shipping:

- **Ports of Ireland :** *A. nodosum* harvesting will not impact on Ports of Ireland, which are absent from the proposed license area. See Ports, Harbours and Shipping Policies above. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: Not required.
- **Limits of Pilotage Districts:** *A. nodosum* harvesting will not impact on Limits of Pilotage Districts, which are absent from the proposed license area. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: Not required.
- **Popular Destination:** *A. nodosum* harvesting will not impact on 'Popular Destinations', which are absent from the proposed license area. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: Not required.
- **Frequently used Routes (300 gross tonnes and above):** *A. nodosum* harvesting will not impact on Frequently used Routes (300 gross tonnes and above), which are absent from the proposed license area. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: Not required.
- **National Ferry Route:** *A. nodosum* harvesting will not impact on National Ferry Routes (e.g. Derrynane-Skelligs and Dursey Island). In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: See Appendix 4 (Code of Practice) for measures to ensure no interactions with ferry routes.
- **Limits of harbours:** *A. nodosum* harvesting will not impact on Limits of harbours, which are absent from the proposed license area. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: Not required.
- **Ferry port:** *A. nodosum* harvesting will not impact on Ferry ports, which are absent from the proposed license area. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: Not required.
- **Cargo and tanker density:** *A. nodosum* harvesting will not impact on Cargo and tanker density. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: See Appendix 4 (Code of Practice) for measures to ensure no interactions with cargo and tanker vessels.
- **Passenger vessel density:** *A. nodosum* harvesting will not impact on Passenger vessels. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: See Appendix 4 (Code of Practice) for measures to ensure no interactions with Passenger vessels.

Seafloor and water column integrity

- **Benthic broad habitat types:** The following habitats types are in subtidal waters and are unlikely to be directly impacted by hand harvesting of *A. nodosum* in the intertidal zone: Abyssal, Circalittoral coarse sediment, Circalittoral mixed sediment, Circalittoral mud, Circalittoral rock and biogenic reef, Circalittoral sand, Infralittoral coarse sediment, Infralittoral mixed sediment, Infralittoral mud, Infralittoral rock and biogenic reef, Infralittoral sand, Lower bathyal rock and biogenic reef, Lower bathyal sediment, Lower bathyal sediment or Lower bathyal rock and biogenic reef, Offshore circalittoral coarse sediment, Offshore circalittoral mixed sediment, Offshore circalittoral mud, Offshore circalittoral rock and biogenic reef, Offshore circalittoral sand, Upper bathyal rock and biogenic reef, Upper bathyal sediment, Upper bathyal sediment or Upper bathyal rock and biogenic reef. Seafloor and water column integrity is unlikely to be affected. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures:
  - Measures are in place requiring that environmentally safe navigation techniques are employed to ensure protection of marine and coastal habitats in Kenmare River SAC,

including estuarine mud, muddy-fine sand, intertidal sand, saltmarsh habitat, intertidal mobile sand, shingle, reef areas and bogland SAC areas occurring adjacent to the coast.
  - Measures are in place to ensure that environmentally safe navigation techniques are employed when approaching the intertidal zone to avoid infralittoral habitats (e.g. mud, sand, coarse/mixed sediment, biogenic reef) that may be in the vicinity of the lower eulittoral zone . This is outlined in the Code of Practice (Appendix 4).
  - For further details of these measures and other measures related to environmentally safe navigation, see Appendix 4.
- **Estuary:** Estuary habitat is unlikely to be directly impacted by hand harvesting of *A. nodosum* in the intertidal zone, as measures are in place to ensure environmentally safe navigation methods are employed to prevent impacts on estuarine substratum. Seafloor and water column integrity is unlikely to be affected. Other impacts on Estuary habitat are also considered unlikely. This is outlined in the assessment in Appendix 5 and Appendix 7. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: Measures are in place to ensure that hand harvesting does not impact on Estuary habitat, either directly or indirectly, and that no cumulative or in combination effects occur (see Appendix 4, Code of Practice).
- **Transitional water quality:** Transitional water quality of the following areas are unlikely to be affected, as measures are in place to ensure that pollution does not occur and that environmentally safe navigation methods are employed to prevent impacts on estuarine substratum: Kenmare River Estuary, Blackwater K Estuary, Sneem Estuary, Kenmare River, Kilmackillogue Harbour, Ardgroom Harbour. In combination or cumulative effects are unlikely to occur. This is outlined in the assessment in Appendix 7. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: See Appendix 4.

Other:

- **Aquaculture:** Hand harvest activities has the potential to interact with aquaculture activities. Control Measures:
  - The Code of practice for environmentally safe navigation must be followed to ensure no in combination effects which would damage soft substratum areas.
  - Ensure caution when travelling in the vicinity of defined aquaculture navigation routes.
  - Do not impede workboat or tractor access to aquaculture sites along access routes, including but not limited to those associated with routes via Bunaw Pier, Bunaw (Kilmackillogue Pier), areas near Kilmackillogue Pier, Blackwater Pier and Oysterbed Pier, roadway access points at Templenoe (upper Kenmare Bay), access along the foreshore over intertidal habitats (e.g. near Templenoe, via public roads such as R571), areas with existing rights of way and other locations including those near the Beara Peninsula, Sneem (e.g. slipway), Coulagh Bay, Travara, Eyeries, Kilcatherine Point, Ardgroom Harbour, Cleandra (landing pier), Coongar Harbour, Pallas Pier, inner Kenmare Bay, outer Kenmare Bay and private laneways or routes or pick up points.

- **Marine mammals:** Measures are in place to ensure that hand harvesting activities are sustainable, environmentally safe navigation methods are employed and that marine mammals (e.g. harbour seals, grey seals, otter, Bottlenose dolphin, Common dolphin) and other marine species are not impacted or disturbed.

(j) Cultural Heritage (inc. underwater archaeology).

Spatially Specific Policies/ Plan area policies:

- **Heritage Assets Policy 1:** Hand harvesting of *A. nodosum* is compatible with heritage assets and will not impact on heritage assets or sites on land, at sea or in nearshore, intertidal or coastal areas. An assessment of archaeological sites in the vicinity of the license area is included in Appendix 1). In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly on heritage assets, heritage site or archaeological sites, and that no in-combination effects arise (see Appendix 1).

Marine activities/Activities Map:

Heritage assets:

- **Coastal built heritage sites:** *A. nodosum* harvesting will not impact on land based, coastal built heritage sites. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: Not required.
- **Historic coastal towns:** *A. nodosum* harvesting will not impact on Historic coastal towns, as they are absent from the proposed license area. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: Not required.
- **Ship wrecks in Irish waters - recorded year of loss:** There are a number of shipwrecks in Kenmare Bay. All are located in subtidal waters and will not be affected by hand harvesting in the intertidal zone. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: Not required.
- **Coastal UNESCO World Heritage Sites:** *A. nodosum* harvesting will not impact on UNESCO World Heritage Sites, as they are absent from the proposed license area. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: Not required.
- **Wild Atlantic Way Route:** *A. nodosum* harvesting will not impact on land-based Wild Atlantic Way Routes and related activities (see the assessment in Appendix 7 for more details). In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: Not required.
- **Wild Atlantic Way Signature Discovery Points:** *A. nodosum* harvesting will not impact on land-based Wild Atlantic Way Signature Discovery Points and related activities (see the assessment in Appendix 7 for more details). In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: Not required.
- **Causeway Coastal Route:** *A. nodosum* harvesting will not impact on Causeway Coastal Routes, as they are absent from the proposed license area. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: Not required.
- **UNESCO Global Geoparks and Biospheres:** *A. nodosum* harvesting will not impact on UNESCO Global Geoparks and Biospheres, as they are absent from the proposed license area. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: Not required.

(k) Population and Human Health.

There will be no impacts on aspects of public health, including those outlined in the NMPF, as summarised below:

- There will be no impact on rivers, lakes and coastal waters, aquatic waters, marine waters, wastewater, or water quality.
- There will be no impacts on harmful algal blooms.
- There will no impact on UN Sustainable Development Goals, including Good Health and Wellbeing (SDG 3).
- There will be no impact on air quality.

- There will be no impact on health and safety risk of working at sea and the coast.
- There will be no impact on access to the maritime area to participate in tourist, sporting or recreational activities, which makes an important contribution to the health and well-being of people.
- There will be no impact on social benefits related to marine activities and the natural and historic environment on which they are based, including, but not limited to improved health and well-being.
- There will be no impact on social benefits including opportunities to experience a sense of place, enjoyment of the seascape, as well as health and well-being benefits.
- There will be no impact on water-based sports and recreation activities which benefit public health and wellbeing.

Spatially Specific Policies and Plan area policies: This application does not give rise to pressures or impacts on population and human health. The likelihood of giving rise to LSEs in this application is low. In combination or cumulative effects are unlikely to occur.

Marine activities/Activities Map: This application does not give rise to pressures or impacts on population and human health. The likelihood of giving rise to LSEs in this application is low. In combination or cumulative effects are unlikely to occur.

(l) Major accidents and disasters.

Spatially Specific Policies and Plan area policies: Steps are also in place to prevent interactions with other marine activities. There are no impact on objectives and policies in the NMPF, including Safety at Sea. This application does not give rise to pressures or impacts that would lead to major accidents and disasters. The likelihood of giving rise to LSEs in this application is low. In combination or cumulative effects are unlikely to occur:

- **Safety at Sea Policies 1 to 5:** This application to hand harvest *A. nodosum* ensures H&S requirements are adhered to. This is outlined in the assessment in Appendix 5. This proposal will not affect Safety at Sea Policy 1 is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. Control Measures: See Appendix 4 (Code of Practice) for measures to ensure the sustainability of harvesting activities, adherence to H&S measures and measures to ensure that direct, indirect, cumulative or in-combination effects do not occur.

Marine activities/Activities Map: This application does not give rise to pressures or impacts that would lead to major accidents and disasters. The likelihood of giving rise to LSEs in this application is low. In combination or cumulative effects are unlikely to occur.

(m) Climate.

Spatially Specific Policies and Plan area policies:

- **Climate Change Policy 1 and 2:** Hand harvesting of *A. nodosum* is compatible with climate change policies. *A. nodosum* is a renewable resource and as hand harvesting of *A. nodosum* will be undertaken in a sustainable manner to allow regeneration of the resource, net primary production of carbon will not be significantly affected. In addition, marine macrophytes such as seaweed account for low levels of global net primary production (NPP) of carbon per annum (0.95%) compared to other sources, e.g. the combined category of land sources (e.g. land plants, forestry, crops) and marine phytoplankton together account for 99% of global NPP of carbon per annum. Non-seaweed sources such as marine phytoplankton are the main contributor to carbon sequestration in the ocean, accounting for over 97% of the total photosynthesized carbon in the ocean every year. *A. nodosum* harvesting is entirely compatible with Ireland's National and local

authority plans, strategies, policies in relation to climate change and the Climate Action Bill. *A. nodosum* harvesting is also compatible with and does not impact on flood defence, physical features, habitats, carbon sequestration ecosystem services and existing and planned developments and settlements in coastal areas. High value carbon sequestration areas include soft substratum habitats, which will not be affected by or subjected to harvesting activities. See the assessments in Appendix 5 and Appendix 7 of this application. This application will not adversely impact on greenhouse gas emissions, sea level rise, ocean acidification, changing weather patterns or climate change adaptation. This application will not adversely impact on climate change policy 1 and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. Control Measures: Measures are in place to ensure that hand harvesting activities are sustainable and do not directly or indirectly negatively impact on biodiversity and climate change policies and that no cumulative or in-combination effects arise. See Appendix 4, Code of Practice, and the Natura Impact Statement (NIS) for details.

Marine activities/Activities Map:

Climate change: See climate change policy no. 1 and 2 above.
(a) Main coastal town: See climate change policy no. 1 and 2 above.
(b) Contribution to carbon sequestration: See climate change policy no. 1 and 2 above.

(n) Waste.

Spatially Specific Policies and Plan area policies:

- **Marine Litter Policy 1:** This application will not negatively impact on waste, re-use or recycling or marine and coastal litter. This is outlined in the assessment in Appendix 5 of this application. This application will not adversely impact on Marine Litter Policy 1 and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. Control Measures: Measures are in place to ensure that hand harvesting activities are sustainable and do not give rise to marine and coastal litter, directly or indirectly, and that no cumulative or in-combination effects arise.
- **Wastewater Treatment and Disposal Policy 1 and 2:** Hand harvesting of *A. nodosum* will not impact on Wastewater Treatment and Disposal Policy 1 and 2. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: Measures are in place to ensure that hand harvesting activities are sustainable. See Appendix 4, Code of Practice, for measures to ensure that harvesting does not occur in the vicinity of sewage outfalls, and that direct, indirect, cumulative or in-combination effects do not occur.

Marine activities/Activities Map:

Water quality, wastewater treatment and disposal:

- **Raw sewage discharge points**: There is no impact between hand harvesting and Raw sewage discharge points. In combination or cumulative effects are unlikely to occur. This is outlined in the assessment in Appendix 5. This proposal is unlikely to give rise to LSEs. Control Measures: BioAtlantis will not harvest in areas near sewage outfalls or other sources of pollution. Moreover, senescing or decomposing seaweed will not be harvested.
- **Bathing water quality**: There is no impact between hand harvesting and Bathing water quality. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: None required.
- **Urban waste agglomerates failing EU water directive:** There is no impact between hand harvesting and Urban waste agglomerates failing EU water directive. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: None required.

- **Rivers-Ireland:** There is no impact between hand harvesting and Rivers-Ireland. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: None required. Measures are in place to ensure no impact on river estuaries (see Appendix 4, Code of Practice).
- **Rivers-Northern Ireland:** N/A. Control Measures: N/A.
- **Lakes - Ireland:** There is no impact between hand harvesting and Lakes - Ireland. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: None required.
- **Lakes - Northern Ireland:** N/A. Control Measures: N/A.
- **Transitional water quality:** Transitional water quality of the following areas are unlikely to be affected, as measures are in place to ensure that pollution does not occur and that environmentally safe navigation methods are employed to prevent impacts on estuarine substratum: Kenmare River Estuary, Blackwater K Estuary, Sneem Estuary, Kenmare River, Kilmackillogue Harbour, Ardgroom Harbour. In combination or cumulative effects are unlikely to occur. This is outlined in the assessment in Appendix 7. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: See Appendix 4.
- **Coastal water quality:** As above for Transitional water quality - coastal water quality in Kenmare Bay is unlikely to be affected. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. Control Measures: above for Transitional water quality.

(o) Material Assets.

Spatially Specific Policies and Plan area policies:

This application does not give rise to pressures or impacts on population and Material Assets. The likelihood of giving rise to LSEs in this application is low. In combination or cumulative effects are unlikely to occur.

Marine activities/Activities Map:

This application does not give rise to pressures or impacts on population and Material Assets. The likelihood of giving rise to LSEs in this application is low. In combination or cumulative effects are unlikely to occur.

5. Assessment and Results:

(a) Spatially Specific Policies:

Marine planning policies which apply to Kenmare River SAC are denoted by an asterisk (*). Marine Plan Area Policies may apply to any area within the Maritime Area.

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
1	Aquaculture Policy 2	Non-aquaculture proposals in aquaculture production areas must demonstrate consideration of, and compatibility with, aquaculture production. Where compatibility is not possible, proposals must demonstrate that they will, in order of preference: a) avoid; b) minimise; c) mitigate significant adverse impacts on aquaculture. d) If it is not possible to mitigate significant adverse impacts upon aquaculture, proposals should set out the reasons for proceeding.	**Explanation:** Hand harvesting of *A. nodosum* is compatible with aquaculture production as there is no spatial overlap between both activities. This is outlined in the assessment in Appendix 7 (Sections 3(a)(iii) and 3(b)(iii)). In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly with aquaculture, and that no cumulative or in-combination effects arise (see section 9 of Appendix 4, Code of Practice).
2	Fisheries Policy 1*	Proposals that may have significant adverse impacts on access for existing fishing activities, must demonstrate that they will, in order of preference: a) avoid, b) minimise, or c) mitigate such impacts. d) If it is not possible to mitigate significant adverse impacts on fishing activity, the public benefits for proceeding with the proposal that outweigh the significant adverse impacts on existing fishing activity must be demonstrated.	**Explanation:** Hand harvesting of *A. nodosum* is compatible with fishing activities. This is outlined in the assessment in Appendix 5, Appendix 10 and also in the following sections of Appendix 7: • Table 3b: Impact at sites relevant to angling and fishing. • Table 3(a) (i): point 37: Fishing and angling- sea. • Table 3(a) (i): point 38: Fishing and angling- freshwater. • Table 3(c): Charter boat activities. • Table 6: point 2: Kenmare Bay fisheries. • Section 3(c): Fishing and Fisheries. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs.

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
			Control Measures: Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly on fish, fisheries or fishing activities, and that no in-combination effects arise (see Appendix 4, Code of Practice).
3	Heritage Assets Policy 1*	Proposals that demonstrate they will contribute to enhancing the significance of heritage assets will be supported, subject to the outcome of statutory environmental assessment processes and subsequent decision by the competent authority, and where they contribute to the policies and objectives of the NMPF. Proposals unable to contribute to enhancing the significance of heritage assets will only be supported if they demonstrate that they will, in order of preference: a) avoid, b) minimise, or c) mitigate harm to the significance of heritage assets, and d) if it is not possible, to mitigate harm, then the public benefits for proceeding with the proposal must outweigh the harm to the significance of the heritage assets. (see definition of 'Public Benefits' in the NMPF Glossary)	**Explanation:** Hand harvesting of *A. nodosum* is compatible with heritage assets and will not impact on heritage assets or sites on land, at sea or in nearshore, intertidal or coastal areas. An assessment of archaeological sites in the vicinity of the license area is included in Appendix 1). In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly on heritage assets, heritage site or archaeological sites, and that no in-combination effects arise (see section Appendix 1).
4	ORE Policy 3	Any non-ORE proposals that are in or could affect sites held under a permission or that are subject to an ongoing permitting or consenting process for renewable energy generation (wind, wave or tidal) should demonstrate that they will in order of preference: a) avoid, b) minimise, c) mitigate adverse impacts,	**Explanation:** Hand harvesting of *A. nodosum* will not affect sites held under a permission or that are subject to an ongoing permitting or consenting process for renewable energy generation. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		d) if it is not possible to mitigate significant adverse impacts, proposals should set out the reasons for proceeding. Applicants for non-ORE proposals in or affecting ORE sites should engage ORE developers in consultation during the pre-application processes as appropriate.	
5	ORE Policy 5	Proposals for activity that may adversely impact ORE test projects by virtue of being within or adjacent to ORE test sites, or between site and landfall of ORE test projects that may adversely impact ORE test site projects, should demonstrate that they will in order of preference: a) avoid, b) minimise, c) mitigate adverse impacts.	**Explanation:** Hand harvesting of *A. nodosum* will not adversely impact on ORE test projects. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.
6	Petroleum Policy 1	Proposals in areas where petroleum activities or petroleum production infrastructure have already been approved, or where applications consistent with the Government's prohibition on new exploration activity are under consideration, should only be authorised where compatibility with the existing, authorised or proposed activity can be satisfactorily demonstrated or the proposal is clearly of strategic or national importance. Compatibility should be achieved, in order of preference, through: a) avoiding, or b) minimising, or c) mitigating adverse impacts. d) If it is not possible to mitigate significant adverse impacts, proposals should set out the reasons for proceeding	**Explanation:** Hand harvesting of *A. nodosum* will not adversely impact on petroleum activities or petroleum production infrastructure. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.
7	Ports, Harbours	Proposals within ports limits, beside or in the vicinity of ports, and / or that impact upon the main routes of significance to a	**Explanation:** Hand harvesting of *A. nodosum* will not adversely impact on ports. In addition, harvesting will not adversely impact on piers,

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
	and Shipping Policy 4*	port, must demonstrate within applications that they have: • been informed by consultation at pre-application stage or earlier with the relevant port authority; • have carried out a navigational risk assessment including an analysis of maritime traffic in the area; and • have consulted Department of Transport, MSO and Commissioners of Irish Lights. Applicants must continue to engage parties identified in pre-application processes as appropriate during the decision-making process.	quays, harbours or navigation within the maritime area (see Appendix 7: Section 3(a)(i), No. 39, Table 3a and Section 3 (b)(i), No. 78, Table 7a). In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly on piers, quays, harbours or navigation within the maritime area, and that no in-combination effects arise. See Appendix 4, Code of Practice, as follows: • Section 3.4. Navigation to harvest sites. • Section 3.14. Prevent interactions. • Section 7. Environmentally safe navigation. • Section 8: Tourism, sport and recreation.
8	Protected Marine Sites Policy 2	Proposals supporting the objectives of protected marine sites should be supported and: • be informed by appropriate guidance • must demonstrate that they are in accordance with legal requirements, including statutory advice provided by authorities relevant to protected marine sites.	**Explanation:** This application to hand harvest *A. nodosum* supports the objectives for protected marine sites, including SACs and SPAs. This is outlined in the assessment in Appendix 5. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** See Appendix 4 (Code of Practice) for measures to ensure sustainability of harvesting activities and protection of marine sites and measures to ensure that activities do not impact directly or indirectly on protected sites, and that no cumulative or in-combination effects arise.

(b) Plan area policies:

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
1	Access Policy 1*	Proposals, including in relation to tourism and recreation, should demonstrate that they will, in order of preference: a) avoid, b) minimise, or c) mitigate significant adverse impacts on public access.	**Explanation:** Hand harvesting of *A. nodosum* is compatible with and will not impact on tourism and recreation. This is outlined in the assessment in Appendix 7 (sections 3(a)(i) and 3(b)(i)). This application will not adversely impact on public access and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly with tourism and recreation, and that no cumulative or in-combination effects arise (see Appendix 4 for details including Section 8. Tourism, sport and recreation).
2	Access Policy 2*	Proposals demonstrating appropriate enhanced and inclusive public access to and within the maritime area, and that consider the future provision of services for tourism and recreation activities, should be supported, subject to the outcome of statutory environmental assessment processes and subsequent decision by the competent authority, and where they contribute to the policies and objectives of the NMPF.	**Explanation:** As above for access policy 1. This application will not adversely impact on public access and is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly with tourism and recreation, and that no cumulative or in-combination effects arise (see Appendix 4 for details including Section 8. Tourism, sport and recreation).
3	Air Quality Policy 1*	Proposals that support a reduction in air pollution should be supported, subject to the outcome of statutory environmental assessment processes and subsequent decision by the competent authority, and where they contribute to the policies and objectives of the NMPF. Proposals must demonstrate consideration of their contribution to air pollution, both direct and cumulative.	**Explanation:** Hand harvesting of *A. nodosum* will not impact on air quality. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
4	Air Quality Policy 2*	Where proposals are likely to result in or facilitate an increase in air pollution, proposals should demonstrate that they will, in order of preference in accordance with legal requirements and standards: a) avoid, b) minimise, or c) mitigate air pollution.	**Explanation:** As above for air quality policy 1. This application will not adversely impact on air quality and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Mitigation not required.
5	Aquaculture Policy 1*	Proposals for sustainable development of aquaculture that: • demonstrate use of innovative approaches, and / or • contribute to diversification of species being grown in a given locality, particularly proposals applying a multi-trophic approach, and / or • enhances resilience to the effects of climate change should be supported.	**Explanation:** Hand harvesting of *A. nodosum* will not involve or impact on aquaculture. See Aquaculture Policy 2 above. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.
6	Aquaculture Policy 3*	Land-based coastal infrastructure that is critical to and supports development of aquaculture should be supported, in accordance with any legal requirements and provided environmental safeguards contained within authorisation processes are fully met.	**Explanation:** Hand harvesting of *A. nodosum* will not involve or impact on land based coastal infrastructure critical to and supporting aquaculture. See Aquaculture Policy 2 above. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.
7	Biodiversity Policy 1*	Proposals incorporating features that enhance or facilitate species adaptation or migration, or natural native habitat connectivity will be supported, subject to the outcome of statutory environmental assessment processes and subsequent decision by the competent authority, and where they contribute to the policies and objectives of the NMPF. Proposals that may have significant adverse impacts on species adaptation or migration, or on natural native habitat connectivity must demonstrate that they will, in order of preference and in accordance with legal requirements: a) avoid,	**Explanation:** Hand harvesting of *A. nodosum* is compatible with biodiversity policy 1 and will not impact on species adaptation or migration, or on natural native habitat connectivity. This is outlined in the assessment in Appendix 5 and Appendix 7 of this application. This application will not adversely impact on biodiversity policy 1 and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities are sustainable, do not directly or indirectly

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		b) minimise, or c) mitigate significant adverse impacts on species adaptation or migration, or on natural native habitat connectivity.	negatively impact on biodiversity, and that no cumulative or in-combination effects arise. See Appendix 4, Code of Practice, and the Natura Impact Statement (NIS) for details.
8	Biodiversity Policy 2*	Proposals that protect, maintain, restore and enhance the distribution and net extent of important habitats and distribution of important species will be supported, subject to the outcome of statutory environmental assessment processes and subsequent decision by the competent authority, and where they contribute to the policies and objectives of the NMPF. Proposals must avoid significant reduction in the distribution and net extent of important habitats and other habitats that important species depend on, including avoidance of activity that may result in disturbance or displacement of habitats.	**Explanation:** As above for biodiversity policy 1. This application will not adversely impact on biodiversity policies and will not impact the distribution and net extent of important habitats and other habitats that important species depend on. The proposal will not lead to disturbance or displacement of habitats. This is outlined in the assessment in Appendix 5 and Appendix 7 of this application. This application will not adversely impact on biodiversity policy 2 and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities are sustainable, do not directly or indirectly negatively impact on biodiversity and that no cumulative or in-combination effects arise. See Appendix 4, Code of Practice, and the Natura Impact Statement (NIS) for details.
9	Biodiversity Policy 3*	Where marine or coastal natural capital assets are recognised by Government: • Proposals must seek to enhance marine or coastal natural capital assets where possible. • Proposals must demonstrate that they will in order of preference, and in accordance with legal requirements: a) avoid, b) minimise, or c) mitigate significant adverse impacts on marine or coastal natural capital assets, or d) if it is not possible to mitigate significant adverse impacts on	**Explanation:** As above for biodiversity policy 1. This application will not adversely impact on biodiversity policies and will not impact on marine or coastal natural capital assets. This application will not adversely impact on biodiversity policy 3 and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities are sustainable and do not directly or indirectly negatively impact on biodiversity and that no cumulative or in-combination effects arise. See Appendix 4, Code of Practice, and the Natura Impact Statement (NIS) for details.

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		marine or coastal natural capital assets proposals must set out the reasons for proceeding.	
10	Biodiversity Policy 4*	Proposals must demonstrate that they will, in order of preference and in accordance with legal requirements: a) avoid, b) minimise, or c) mitigate significant disturbance to, or displacement of, highly mobile species.	**Explanation:** As above for biodiversity policy 1. This application will not adversely impact on biodiversity policies and will not give rise to disturbance to, or displacement of, highly mobile species. This is outlined in the assessment in Appendix 5 and Appendix 7 of this application This application will not adversely impact on biodiversity policy 4 and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities are sustainable and do not directly or indirectly negatively impact on biodiversity and that no cumulative or in-combination effects arise. See Appendix 4, Code of Practice, and the Natura Impact Statement (NIS) for details.
11	Climate Change Policy 1*	Proposals should demonstrate how they: • avoid contribution to adverse changes to physical features of the coast; • enhance, restore or recreate habitats that provide a flood defence or carbon sequestration ecosystem services where possible. Where potential significant adverse impacts upon habitats that provide a flood defence or carbon sequestration ecosystem services are identified, these must be in order of preference and in accordance with legal requirements: a) avoided; b) minimised; c) mitigated. d) if it is not possible to mitigate significant adverse impacts, the reasons for proceeding must be set out. This policy should be included as part of statutory environmental assessments where such assessments are required.	**Explanation:** Hand harvesting of *A. nodosum* is compatible with climate change policies. *A. nodosum* is a renewable resource and as hand harvesting of *A. nodosum* will be undertaken in a sustainable manner to allow regeneration of the resource, net primary production of carbon will not be significantly affected. In addition, marine macrophytes such as seaweed account for low levels of global net primary production (NPP) of carbon per annum (0.95%) compared to other sources, e.g. the combined category of land sources (e.g. land plants, forestry, crops) and marine phytoplankton together account for 99% of global NPP of carbon per annum. Non-seaweed sources such as marine phytoplankton are the main contributor to carbon sequestration in the ocean, accounting for over 97% of the total photosynthesized carbon in the ocean every year.

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
			A. nodosum harvesting is entirely compatible with Ireland's National and local authority plans, strategies, policies in relation to climate change and the Climate Action Bill. *A. nodosum* harvesting is also compatible with and does not impact on flood defence, physical features, habitats, carbon sequestration ecosystem services and existing and planned developments and settlements in coastal areas. High value carbon sequestration areas include soft substratum habitats, which will not be affected by or subjected to harvesting activities. See the assessments in Appendix 5 and Appendix 7 of this application. This application will not adversely impact on climate change policy 1 and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities are sustainable and do not directly or indirectly negatively impact on biodiversity and climate change policies and that no cumulative or in-combination effects arise. See Appendix 4, Code of Practice, and the Natura Impact Statement (NIS) for details.
12	Climate Change Policy 2*	For the lifetime of the proposal, the following climate change matters must be demonstrated: • estimation of likely generation of greenhouse gas emissions, both direct and indirect; • measures to support reductions in greenhouse gas emissions where possible; • likely impact of climate change effects upon the proposal from factors including but not limited to: sea level rise, ocean acidification, changing weather patterns; • measures incorporated to enable adaptation climate change effects; • likely impact upon climate change adaptation measures adopted in the coastal area relevant to the proposal and/or adaptation	**Explanation:** As outlined above for Climate Change Policy no. 1, Hand harvesting of *A. nodosum* is compatible with climate change policies. This application will not adversely impact on greenhouse gas emissions, sea level rise, ocean acidification, changing weather patterns or climate change adaptation. This is outlined in the assessment in Appendix 5 and Appendix 7 of this application. This application will not adversely impact on climate change policy 2 and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities are sustainable and do not directly or indirectly negatively impact on biodiversity and climate change

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		measures adopted by adjacent activities; • where likely impact upon climate change adaptation measures in the coastal area relevant to the proposal and/or adaptation measures adopted by adjacent activities is identified, these impacts must be in order of preference and in accordance with legal requirements: a) avoided; b) minimised; c) mitigated; d) if it is not possible to mitigate significant adverse impacts, the reasons for proceeding must be set out.	policies and that no cumulative or in-combination effects arise. See Appendix 4, Code of Practice, and the Natura Impact Statement (NIS) for details.
13	Co-existence Policy 1*	Proposals should demonstrate that they have considered how to optimise the use of space, including through consideration of opportunities for co-existence and co-operation with other activities, enhancing other activities where appropriate. If proposals cannot avoid significant adverse impacts (including displacement) on other activities they must, in order of preference: a) minimise significant adverse impacts, b) mitigate significant adverse impacts, or c) if it is not possible to mitigate significant adverse impacts, proposals should set out the reason for proceeding.	**Explanation:** Hand harvesting of *A. nodosum* is compatible with and will not impact on other marine and coastal activities. This is outlined in the assessment in Appendix 5 and Appendix 7. This application will not adversely impact on co-existence and cooperation with other activities and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities involve co-existence and cooperation with other activities, do not impact directly or indirectly with co-existence policies and that no cumulative or in-combination effects arise (see Appendix 4 for details).
14	Defence and Security Policy 1*	Any proposal that has the potential to interfere with the performance by the Defence Forces of their security and non-security related tasks must be subject to consultation with the Defence Organisation. This includes potential interference with: • Safety of navigation and access to naval facilities; • Firing, test or exercise areas;	**Explanation:** Hand harvesting of *A. nodosum* will not impact Defence and Security. Harvesting will not take place near danger and restricted areas that coincide with marine or coastal areas (areas identified by the Irish Aviation Authority) or naval bases (i.e. Haulbowline Naval Base). In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs.

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		• Communication, and surveillance systems; • Fishery protection functions. Proposals should only be supported where, having consulted with the Defence Organisation, they are satisfied that it will not result in unacceptable interference with the performance by the Defence Forces of their security and non-security related tasks. Any proposal will be subject to the relevant Environmental Assessments, as set out in the introduction to the NMPF.	**Control Measures:** Mitigation not required.
15	Employment Policy 1*	Proposals should demonstrate contribution to a net increase in marine related employment in Ireland, particularly where the proposals • are in line with the skills available in Irish coastal communities adjacent to the maritime area, • improve the sustainable use of natural resources, • diversify skills to enable employment in emerging industries.	**Explanation:** This application to hand harvest *A. nodosum* contributes positively to efforts aimed at enhancing the employment, sustainability and economic resilience of rural coastal and/or island communities. See main text of the application for details. There are a variety of marine related activities in the electoral districts of Kenmare, Kenmare (11), Dawros (2), Tahilla (2), Sneem (1), Castlecove (1), Caherdaniel (4), Darrynane (2), Ardea (3), Glanmore (2), Kilcatherine (6), Coulagh (2) and Kilnamagh (2). The range of activities in the vicinity of Kenmare River SAC have been identified and measures are in place to ensure that in combination or cumulative effects do not occur (see Appendix 7 for details). This proposal is unlikely to give rise to LSEs. **Control Measures:** See Appendix 4 for the Code of Practice for measures to ensure sustainability of harvesting activities and to ensure that impacts (directly or indirectly) do not occur, and that no cumulative or in-combination effects arise.
16	Environmental – Ocean Health Policy 1*	Compliance with NMPF policies relating to: • Biodiversity • Non-Indigenous Species • Water Quality • Sea-floor and Water Column Integrity • Marine litter	**Explanation:** This application aligns with and is compatible with NMPF policies in relation to Biodiversity, Non-Indigenous Species, Water Quality, Sea-floor and Water Column Integrity, Marine litter and Underwater Noise. This application does not give rise to pressures due to noise, underwater noise and vibration. This is outlined in the assessment in Appendix 5 and Appendix 7 of this

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		• Underwater Noise should include demonstration of contribution to the relevant MSFD targets identified.	application. This application will not adversely impact on Environmental – Ocean Health Policy 1 and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities are sustainable and do not directly or indirectly negatively impact on NMPF policies and that no cumulative or in-combination effects arise. See Appendix 4, Code of Practice, and the Natura Impact Statement (NIS) for details.
17	Fisheries Policy 2*	Where significant impact upon fishing activity arising from any proposal is identified, a Fisheries Management and Mitigation Strategy (FMMS) should be prepared by the proposer of development or other maritime area use, in consultation with local fishing interests and other interests as appropriate. All efforts should be made to agree the FMMS with those interests. Those interests should also undertake to engage with the proposer and provide best available, transparent and accurate information and data in a timely manner to help complete the FMMS. The FMMS should be drawn up as part of readying a proposal prior to submission, with measures identified to be considered in finalising conditions of any authorisations granted. Development of the strategy should be coordinated with other relevant assessments such as EIA where possible. The content of the Fisheries Management and Mitigation Strategy (FMMS) should be relevant to the particular circumstances and could include: • An assessment of the potential impact of all stages of the development or other suggested use on the affected fishery or fisheries, both in socio-economic terms and in relation to environmental sustainability. This assessment should include consideration of any impact upon cultural identity within fishing	**Explanation:** As above for access Fisheries policy 1. This application will not adversely impact on fish, fisheries or fishing activities and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly on fish, fisheries or fishing activities, and that no cumulative or in-combination effects arise (see Appendix 4, Code of Practice).

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		communities, as well as identifying indirect / in-combination matters. • A recognition that the disruption to existing fishing opportunities / activity should be minimised as far as possible. • Demonstration of the public benefit(s) that outweigh the significant impacts identified. • Reasonable measures to mitigate any constraints which the proposed development or use may place on existing or proposed fishing activity. • Reasonable measures to mitigate any potential impacts on sustainability of fish stocks (e.g. impacts on spawning grounds or areas of fish or shellfish abundance) and any socio-economic impacts. Where it does not prove possible to agree the FMMS with all interests: • Divergent views and the reasons for any divergence of views between the parties should be fully explained in the FMMS, and dissenting views should be given a platform within the said FMMS to make their case. • Where divergent views are identified, relevant public authorities should be engaged to identify informal and formal steps designed to enable proposal(s) to progress.	
18	Fisheries Policy 3*	Proposals that enhance the sustainability of fisheries or support a sustainable fishing industry, including the industry's diversification and or enhanced resilience to the effects of climate change, should be supported provided they fully meet the environmental safeguards contained within authorisation processes.	**Explanation:** As above for access Fisheries policy 1. This application will not adversely impact on fish, fisheries or fishing activities and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly on fish,

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
			fisheries or fishing activities, and that no cumulative or in-combination effects arise (see Appendix 4, Code of Practice).
19	Fisheries Policy 4*	Infrastructural proposals that enable access to fishing activities should be supported provided they fully meet the environmental safeguards contained within authorisation processes.	**Explanation:** As above for access Fisheries policy 1. This application will not adversely impact on fish, fisheries or fishing activities and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly on fish, fisheries or fishing activities, and that no cumulative or in-combination effects arise (see Appendix 4, Code of Practice).
20	Fisheries Policy 5*	Proposals, regardless of the type of activity they relate to, enhancing essential fish habitat, including spawning, nursery and feeding grounds, and migratory routes should be supported. If proposals cannot enhance essential fish habitat, they must demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate significant adverse impact on essential fish habitat, including spawning, nursery and feeding grounds, and migration routes. d) If it is not possible to mitigate significant adverse impact on essential fish habitat, proposals must set out the reasons for proceeding.	**Explanation:** As above for access Fisheries policy 1. This application will not adversely impact on fish, fisheries or fishing activities and is unlikely to give rise to LSEs. In particular, see Appendix 10 for details in relation the distribution, spawning areas, nursery areas, food sources and fish and shellfish species. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly on fish, fisheries or fishing activities, and that no cumulative or in-combination effects arise (see Appendix 4, Code of Practice).
21	Fisheries Policy 6*	Ports and harbours should seek to engage with fishing and other relevant stakeholders at an early stage to discuss any changes in infrastructure that may affect them. Any port or harbour developments should take account of the needs of the dependent fishing fleets with a view to avoiding commercial harm where possible. Where a port or harbour has reached a minimum level of	**Explanation:** As above for access Fisheries policy 1. This application will not adversely impact on fish, fisheries or fishing activities and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly on fish,

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		infrastructure required to support a viable fishing fleet, there should be a presumption in favour of maintaining this infrastructure, provided there is an ongoing requirement for it to remain in place and that it continues to be fit for purpose.	fisheries or fishing activities, and that no cumulative or in-combination effects arise (see Appendix 4, Code of Practice).
22	Infrastructure Policy 1*	Appropriate land-based infrastructure which facilitates marine activity (and vice versa) should be supported. Proposals for appropriate infrastructure that facilitates the diversification or regeneration of marine industries should be supported.	**Explanation:** Hand harvesting of *A. nodosum* will not impact Infrastructure Policy 1. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.
	Marine Litter Policy 1*	Proposals that facilitate waste re-use or recycling, or that reduce marine and coastal litter will be supported, where they contribute to the policies and objectives of the NMPF. Proposals that could potentially increase the amount of litter that is discharged into the maritime area, either intentionally or accidentally, must include measures (such as development of a waste management plan) to, in order of preference and in accordance with legal requirements: a) avoid, b) minimise, or c) mitigate the litter. Demonstration of these measures must provide satisfactory evidence that the proposal is able to manage all waste without creation of litter.	**Explanation:** This application will not negatively impact on waste, re-use or recycling or marine and coastal litter. This is outlined in the assessment in Appendix 5 of this application. This application will not adversely impact on Marine Litter Policy 1 and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities are sustainable and do not give rise to marine and coastal litter, directly or indirectly, and that no cumulative or in-combination effects arise.
23	Mineral Exploration and Mining Policy 1*	Only proposals which are in line with national policy on mineral exploration and mining should be considered, provided they fully meet the environmental safeguards contained within the mineral exploration and mining consent processes.	**Explanation:** Hand harvesting of *A. nodosum* will not impact Mineral Exploration and Mining Policy 1. This proposal is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Mitigation not required.

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
24	Natural Gas Storage Policy 1*	Subject to assessments required for the protection of the environment, and only where in keeping with the outcome of the review of the security of energy supply of Ireland's electricity and natural gas systems (which is being carried out by Department of the Environment, Climate and Communications), natural gas storage proposals should be supported.	**Explanation:** Hand harvesting of *A. nodosum* will not impact on Natural Gas Storage Policy 1. This proposal is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Mitigation not required.
25	Non-indigenous Species Policy 1*	Reducing the risk of the introduction and / or spread of non-indigenous species is a requirement of all proposals. Proposals must demonstrate a risk management approach to prevent the introduction of and / or spread of non-indigenous species, particularly when: a) moving equipment, boats or livestock (for example fish or shellfish) from one water body to another, b) introducing structures suitable for settlement of non-indigenous species, or the spread of non-indigenous species known to exist in the area of the proposal.	**Explanation:** This application will not increase the risk of the introduction and/or spread of non-indigenous species. This is outlined in the assessment in Appendix 5 of this application. This application will not adversely impact on Non-indigenous Species Policy 1 and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities are sustainable and do not increase the risk of the introduction and/or spread of non-indigenous species, directly or indirectly and that no cumulative or in-combination effects arise (see Appendix 4, Code of Practice).
26	ORE Policy 1*	Proposals that assist the State in meeting the Government's offshore renewable energy targets, including the target of achieving 5GW of capacity in offshore wind by 2030 and proposals that maximise the long-term shift from use of fossil fuels to renewable electricity energy, in line with decarbonisation targets, should be supported. All proposals will be rigorously assessed to ensure compliance with environmental standards and seek to minimise impacts on the marine environment, marine ecology and other maritime users.	As above for ORE Policy 5 above. This application will not adversely impact on renewable energy targets and plans and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Mitigation not required.
27	ORE Policy 10*	Opportunities for land-based, coastal infrastructure that is critical to and supports development of ORE should be prioritised in plans and policies, where possible.	**Explanation:** As above for ORE Policy 5 above. This application will not adversely impact on renewable energy targets and plans and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur.

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
			Control Measures: Mitigation not required.
28	ORE Policy 11*	Where appropriate, proposals that enable the provision of emerging renewable energy technologies and associated supply chains will be supported.	As above for ORE Policy 5 above. This application will not adversely impact on renewable energy targets and plans and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Mitigation not required.
29	ORE Policy 2*	Proposals must be consistent with national policy, including the Offshore Renewable Energy Development Plan (OREDP) and its successor. Relevant Projects designated pursuant to the Transition Protocol and those projects that can objectively enable delivery on the Government's 2030 targets will be prioritised for assessment under the new consenting regime. Into the future, areas designated for offshore energy development, under the Designated Marine Area Plan process set out in the Maritime Area Planning Bill, will underpin a plan-led approach to consenting (or development of our marine resources) (Note – see Appendix D of the NMPF on Spatial Designation Process).	**Explanation:** As above for ORE Policy 5 above. This application will not adversely impact on renewable energy targets and plans and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Mitigation not required.
30	ORE Policy 4*	Decisions on ORE developments should be informed by consideration of space required for other activities of national importance described in the NMPF.	**Explanation:** As above for ORE Policy 5 above. This application will not adversely impact on renewable energy targets and plans and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Mitigation not required.
31	ORE Policy 6*	Proposals for infrastructure enabling local use of excess energy generated from emerging marine technologies (wave, tidal, floating wind) should be supported.	**Explanation:** As above for ORE Policy 5 above. This application will not adversely impact on renewable energy targets and plans and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Mitigation not required.

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
32	ORE Policy 7*	Where potential for ports to contribute to ORE is identified, plans and policies related to this port must encourage development in such a way as to facilitate ORE and related supply chain activity.	As above for ORE Policy 5 above. This application will not adversely impact on renewable energy targets and plans and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Mitigation not required.
33	ORE Policy 8*	Proposals for ORE must demonstrate consideration of existing cables passing through or adjacent to areas for development, making sure ability to repair and carry out cable-related remedial work is not significantly compromised. This consideration should be included as part of statutory environmental assessments where such assessments are required.	**Explanation:** As above for ORE Policy 5 above. This application will not adversely impact on renewable energy targets and plans and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Mitigation not required.
34	ORE Policy 9*	permission for ORE must be informed by inclusion of a visualisation assessment that supports conditions on any development in relation to design and layout. Where a development consent is applied for in an area already subject to permission, proposals must include a visualisation assessment to inform design and layout. Visualisation assessments should demonstrate consultation with communities that may be able to view the proposal, in addition to any other ORE development, which had received consent to proceed at a given site at the time the consent application is made, with the aim of minimising impact. Visualisation assessments will be informed by specific emerging guidelines (detailed in the actions set out in Annexes to the NMPF). Prior to specific guidelines being available, policy and best practice relating to visualisation assessment should be used. This consideration must be included as part of statutory environmental assessments where such assessment is required.	**Explanation:** As above for ORE Policy 5 above. This application will not adversely impact on renewable energy targets and plans and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Mitigation not required.
35	Petroleum Policy 2*	Proposals potentially affecting future potential activity in areas (blocks) subject to existing petroleum authorisations should avoid sterilisation of that area for future petroleum-related activity consistent with Government policy, and demonstrate how they, in	**Explanation:** Hand harvesting of *A. nodosum* will not impact on Petroleum Policy 2. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs.

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		order of preference: a) avoid, or b) minimise, or c) mitigate potential adverse impacts on those activities. d) If it is not possible to mitigate significant adverse impacts, proposals should set out the reasons for proceeding.	**Control Measures:** Mitigation not required.
36	Ports, Harbours and Shipping Policy 1*	To provide for shipping activity and freedom of navigation the following factors will be taken into account when reaching decisions regarding development and use: • The extent to which the locational decision interferes with existing or planned routes used by shipping, access to ports and harbours and navigational safety. This includes commercial anchorages and approaches to ports as well as key littoral and offshore routes; • A mandatory Navigation Risk Assessment; • Where interference is likely: whether reasonable alternatives can be identified; and • Where there are no reasonable alternatives: whether mitigation through measures adopted in accordance with the principles and procedures established by the International Maritime Organisation can be achieved at no significant cost to the shipping or ports sector.	**Explanation:** Hand harvesting of *A. nodosum* will not impact on Ports, Harbours and Shipping Policy 1. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.
37	Ports, Harbours and Shipping Policy 2*	Proposals that may have a significant impact upon current activity and future opportunity for expansion of port and harbour activities should demonstrate that they will, in order of preference: a) avoid, b) minimise, or c) mitigate significant adverse impacts, and d) if it is not possible to mitigate significant adverse impacts on current activity and future opportunity for expansion of port and	**Explanation:** As above for Ports, Harbours and Shipping Policy 1. Hand harvesting of *A. nodosum* will not impact on Ports, Harbours and Shipping Policy 2. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		harbour activities, proposals should set out the reasons for proceeding.;	
38	Ports, Harbours and Shipping Policy 3*	Proposals that may have a significant impact upon current activity and future opportunity for expansion of port and harbour activities must demonstrate consideration of the National Ports Policy, the National Planning Framework, and relevant provisions related to the TEN-T network.	**Explanation:** As above for Ports, Harbours and Shipping Policy 1. Hand harvesting of *A. nodosum* will not impact on Ports, Harbours and Shipping Policy 3. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.
39	Ports, Harbours and Shipping Policy 5*	Proposals for capital dredging will be supported where it is necessary to safeguard national port capacity and Ireland's international connectivity, and where required compliance assessments associated with authorisations have been carried out and incorporated into subsequent competent authority decision(s).	**Explanation:** As above for Ports, Harbours and Shipping Policy 1. Hand harvesting of *A. nodosum* will not impact on Ports, Harbours and Shipping Policy 5. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.
40	Ports, Harbours and Shipping Policy 6*	In areas of authorised dredging activity, including those subject to navigational dredging, proposals for other activities will not be supported unless they are compatible with the dredging activity.	**Explanation:** As above for Ports, Harbours and Shipping Policy 1. Hand harvesting of *A. nodosum* will not impact on Ports, Harbours and Shipping Policy 6. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.
41	Ports, Harbours and Shipping Policy 7*	Proposals for maintenance dredging activity will be supported where: • relevant decisions by competent authorities incorporate the outcome of statutory environmental assessment processes, as well as necessary compliance assessments associated with authorisations, including in relation to the planning process; • there will be no significant adverse impact on marine activities or uses or the maritime area. Any potential adverse impact will be, in order of preference, avoided, minimised or mitigated;	**Explanation:** As above for Ports, Harbours and Shipping Policy 1. Hand harvesting of *A. nodosum* will not impact on Ports, Harbours and Shipping Policy 7. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		• dredged waste is managed in accordance with internationally agreed hierarchy of waste management options for sea disposal; • if disposing of dredged material at sea, existing registered disposal sites are used, in preference to new disposal sites; and • where they contribute to the policies and objectives of the NMPF.	
42	Ports, Harbours and Shipping Policy 8*	Proposals that cause significant adverse impacts on licensed disposal areas should not be supported. Proposals that cannot avoid such impact must, in order of preference: a) minimise, b) mitigate, or c) if it is not possible to mitigate the significant adverse impacts, proposals must set out the reasons for proceeding.	**Explanation:** As above for Ports, Harbours and Shipping Policy 1. Hand harvesting of *A. nodosum* will not impact on Ports, Harbours and Shipping Policy 8. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.
43	Ports, Harbours and Shipping Policy 9*	Proposals for the management of dredged material must demonstrate that they have been assessed against the waste hierarchy (see Glossary in the NMPF).	**Explanation:** As above for Ports, Harbours and Shipping Policy 1. Hand harvesting of *A. nodosum* will not impact on Ports, Harbours and Shipping Policy 9. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.
44	Ports, Harbours and Shipping Policy 10	Proposals identifying new dredge disposal sites which are subject to best practice and guidance from previous studies should be supported where: • competent authority decisions incorporate necessary compliance assessments associated with authorisations; and • they contribute to the policies and objectives of the NMPF. Proposals must include an adequate characterisation study, be assessed against the waste hierarchy and must be informed by consultation with all relevant stakeholders.	**Explanation:** As above for Ports, Harbours and Shipping Policy 1. Hand harvesting of *A. nodosum* will not impact on Ports, Harbours and Shipping Policy 10. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.
45	Protected Marine Sites Policy 1*	Proposals must demonstrate that they can be implemented without adverse effects on the integrity of Special Areas of Conservation (SACs) or Special Protection Areas (SPAs). Where adverse effects from proposals remain following mitigation, in line with Habitats	**Explanation:** This application to hand harvest *A. nodosum* supports the objectives for protected marine sites. This is outlined in the assessment in Appendix 5, Appendix 7 and the Natura Impact Statement accompanying this application. In combination or

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		Directive Article 6(3), consent for the proposals cannot be granted unless the prerequisites set by Article 6(4) are met.	cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** See Appendix 4 (Code of Practice) for measures to ensure the sustainability of harvesting activities and protection of marine sites and to ensure that activities do not impact directly or indirectly on protected sites, and that no cumulative or in-combination effects arise
46	Protected Marine Sites Policy 3*	Proposals that enhance a protected marine site's ability to adapt to climate change, enhancing the resilience of the protected site, should be supported and: • be informed by appropriate guidance • must demonstrate that they are in accordance with legal requirements, including statutory advice provided by authorities relevant to protected marine sites.	**Explanation:** This application to hand harvest *A. nodosum* supports the objectives for protected marine sites. This is outlined in the assessment in Appendix 5, Appendix 7 and the Natura Impact Statement accompanying this application. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** See Appendix 4 (Code of Practice) for measures to ensure the sustainability of harvesting activities and protection of marine sites and to ensure that activities do not impact directly or indirectly on protected sites, and that no cumulative or in-combination effects arise.
47	Protected Marine Sites Policy 4*	Until the ecological coherence of the network of protected marine sites is examined and understood, proposals should identify, by review of best available evidence (including consultation with the competent authority with responsibility for designating such areas as required), the features, under consideration at the time the application is made, that may be required to develop and further establish the network. Based upon identified features that may be required to develop and further establish the network, proposals should demonstrate that they will, in order of preference, and in accordance with legal requirements: a) avoid,	**Explanation:** This application to hand harvest *A. nodosum* supports the objectives for protected marine sites. This is outlined in the assessment in Appendix 5, Appendix 7 and the Natura Impact Statement accompanying this application. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** See Appendix 4 (Code of Practice) for measures to ensure the sustainability of harvesting activities and protection of marine sites and to ensure that activities do not impact directly

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		b) minimise, or c) mitigate significant impacts on features that may be required to develop and further establish the network, or d) if it is not possible to mitigate significant impacts, proposals should set out the reasons for proceeding.	or indirectly on protected sites, and that no cumulative or in-combination effects arise.
48	Rural Coastal and Island Communities Policy 1*	Proposals contributing to access, communications, energy self-sufficiency or sustainability of rural coastal and / or island communities should be supported. Proposals should ideally be inclusive of continual education, skills development and training in marine sectors, thus improving the sustainability, social benefits and economic resilience of rural and island communities.	**Explanation:** This application to hand harvest *A. nodosum* contributes to efforts aimed at enhancing the sustainability and economic resilience of rural coastal and/or island communities. See main text of the application for details. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** See Appendix 4 for the Code of Practice for measures to ensure sustainability of harvesting activities and to ensure that impacts (directly or indirectly) do not occur, and that no cumulative or in-combination effects arise.
49	Safety at Sea Policy 1*	Proposals for installation, operation, and decommissioning of Offshore Wind Farms must demonstrate how they will: • Minimise navigational risk between commercial vessels arising from an increase in the density of vessels in maritime space as a result of wind farm layout; and • Allow for recreational vessels within the Offshore Wind Farm (including consideration of turbine height) or redirect recreational vessels, minimising navigational risk arising between recreational and commercial vessels.	**Explanation:** This application to hand harvest *A. nodosum* ensures H&S requirements are adhered to. This is outlined in the assessment in Appendix 5. This proposal will not affect Safety at Sea Policy 1 is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** See Appendix 4 (Code of Practice) for measures to ensure the sustainability of harvesting activities, adherence to H&S measures and measures to ensure that direct, indirect, cumulative or in-combination effects do not occur.
50	Safety at Sea Policy 2*	Proposals for infrastructure that have the potential to significantly reduce under-keel clearance must demonstrate how they will, in order of preference: a) avoid,	**Explanation:** This application to hand harvest *A. nodosum* ensures H&S requirements are adhered to. This is outlined in the assessment in Appendix 5. This proposal will not affect Safety at

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		b) minimise, c) mitigate adverse impacts, or d) if it is not possible to mitigate significant adverse impacts, proposals should set out the reasons for proceeding.	Sea Policy 2 is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** See Appendix 4 (Code of Practice) for measures to ensure the sustainability of harvesting activities, adherence to H&S measures and measures to ensure that direct, indirect, cumulative or in-combination effects do not occur.
51	Safety at Sea Policy 3*	All proposals for temporary or permanent fixed infrastructure in the maritime area must ensure navigational marking in accordance with appropriate international standards and ensure inclusion in relevant charts where applicable.	**Explanation:** This application to hand harvest *A. nodosum* ensures H&S requirements are adhered to. This is outlined in the assessment in Appendix 5. This proposal will not affect Safety at Sea Policy 3 is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** See Appendix 4 (Code of Practice) for measures to ensure the sustainability of harvesting activities, adherence to H&S measures and measures to ensure that direct, indirect, cumulative or in-combination effects do not occur.
52	Safety at Sea Policy 4*	Establishing, changing or disestablishing Aids to Navigation (AtoN) must be sanctioned, in advance of works, by the Commissioners of Irish Lights.	**Explanation:** This application to hand harvest *A. nodosum* ensures H&S requirements are adhered to. This is outlined in the assessment in Appendix 5. This proposal will not affect Safety at Sea Policy 4 is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** See Appendix 4 (Code of Practice) for measures to ensure the sustainability of harvesting activities, adherence to H&S measures and measures to ensure that direct, indirect, cumulative or in-combination effects do not occur.
53	Safety at Sea Policy 5*	Proposals must identify their potential impact, if any, on Maritime Emergency Response (Search and Rescue (SAR), Maritime Casualty and Pollution Response) operations. Where a proposal may have a significant impact on these operations it must demonstrate how it	**Explanation:** This application to hand harvest *A. nodosum* ensures H&S requirements are adhered to. This is outlined in the assessment in Appendix 5. This proposal will not affect Safety at

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		will, in order of preference: a) avoid, b) minimise, c) mitigate adverse impacts, or d) if it is not possible to mitigate significant adverse impacts, proposals should set out the reasons for proceeding, supported by parties responsible for maritime SAR.	Sea Policy 5 is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** See Appendix 4 (Code of Practice) for measures to ensure the sustainability of harvesting activities, adherence to H&S measures and measures to ensure that direct, indirect, cumulative or in-combination effects do not occur.
54	Sea-floor Integrity Policy 1*	Proposals that incorporate measures to support the resilience of marine habitats will be supported, subject to the outcome of statutory environmental assessment processes and subsequent decision by the competent authority and where they contribute to the policies and objectives of the NMPF. Proposals which may have significant adverse impacts on marine, particularly deep sea, habitats must demonstrate that they will, in order of preference and in accordance with legal requirements: a) avoid, b) minimise, or c) mitigate significant adverse impacts on marine habitats, or d) if it is not possible to mitigate significant adverse impacts on marine habitats must set out the reasons for proceeding.	**Explanation:** This application to hand harvest *A. nodosum* supports the objectives for protected marine sites, including SACs and SPAs and will not impact on seafloor/bed integrity. This is outlined in the assessment in Appendix 5. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** See Appendix 4 (Code of Practice) for measures to ensure the sustainability of hand harvesting activities and to ensure that substratum is unaffected and that direct, indirect, cumulative or in-combination effects do not occur.
55	Sea-floor Integrity Policy 2*	Proposals, including those that increase access to the maritime area, must demonstrate that they will, in order of preference and in accordance with legal requirements: a) avoid, b) minimise, or c) mitigate adverse impacts on important habitats and species.	**Explanation:** This application to hand harvest *A. nodosum* supports the objectives for protected marine sites, including SACs and SPAs and will not impact on seafloor/bed integrity. This is outlined in the assessment in Appendix 5. This proposal is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** See Appendix 4 (Code of Practice) for measures to ensure the sustainability of hand harvesting activities and

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
			measures to ensure that substratum is unaffected and that direct, indirect, cumulative or in-combination effects do not occur.
56	Sea-floor Integrity Policy 3*	Proposals that protect, maintain, restore and enhance coastal habitats for ecosystem functioning and provision of ecosystem services will be supported, subject to the outcome of statutory environmental assessment processes and subsequent decision by the competent authority, and where they contribute to the policies and objectives of the NMPF. Proposals must take account of the space required for coastal habitats, for ecosystem functioning and provision of ecosystem services, and demonstrate that they will, in order of preference and in accordance with legal requirements: a) avoid, b) minimise, or c) mitigate for net loss of coastal habitat.	**Explanation:** This application to hand harvest *A. nodosum* supports the objectives for protected marine sites, including SACs and SPAs and will not impact on seafloor/bed integrity. This is outlined in the assessment in Appendix 5. This proposal is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** See Appendix 4 (Code of Practice) for measures to ensure the sustainability of hand harvesting activities and measures to ensure that substratum is unaffected and that direct, indirect, cumulative or in-combination effects do not occur.
57	Seascape and Landscape Policy 1*	Proposals should demonstrate how the likely significant impacts of a development on the seascape and landscape of an area have been considered. Proposals will only be supported if they demonstrate that they, in order of preference: a) avoid, b) minimise, or c) mitigate significant adverse impacts on the seascape and landscape of the area. d) If it is not possible to mitigate significant adverse impacts, proposals must set out the reasons for proceeding. This policy should be included as part of statutory environmental assessments.	**Explanation:** This application to hand harvest *A. nodosum* supports the objectives for protected marine sites, including SACs and SPAs and will not have any seascape and landscape effects, given the use of the traditional methods involved. This proposal is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. Seascape character assessment 9 (SCA9) comprises an indented coastline of counties Kerry and Cork, including; Dingle, Iveragh, Beara, Sheep's Head and Mizen, and their intervening bays; Dingle Bay, Kenmare Bay (River), Bantry Bay, Dunmanus Bay and Roaringwater Bay (ref: Marine Institute (2020). SCA9 is considered to be dense (particularly around the Kenmare river) in licensed aquaculture sites (shellfish, finfish and seaweed), and businesses operators involved in providing angling tours (Kenmare Fishing Tours, The ROSA Sea Fishing and Scenic Tours). Given the

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
			sustainable nature of hand harvesting and the traditional methods employed, there will be no impacts on Regional Seascape Character Areas such as "SCA9 - Atlantic South West Rias, Bays and Islands" and it's aspects (including: boundaries and location, key characteristics, natural influences, cultural and social influences, art and folklore, perceptual influences vistas and views, sense of place, sounds and smells). This proposal is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** See Appendix 4 (Code of Practice) for measures to ensure the sustainability of hand harvesting activities and the methods involved and for measures to ensure that direct, indirect, cumulative or in-combination effects do not occur.
58	Social Benefits Policy 1*	Proposals that enhance or promote social benefits should be supported. Proposals unable to enhance or promote social benefits should demonstrate that they will, in order of preference: a) minimise, or b) mitigate significant adverse impacts which result in the displacement of other existing or authorised (but yet to be implemented) activities that generate social benefits.	**Explanation:** This application to hand harvest *A. nodosum* contributes to efforts aimed at enhancing the sustainability and economic resilience of rural, coastal and/or island communities, in turn, providing significant social benefits. The novel products that will be manufactured from *A. nodosum* will also have immense societal benefits. See main text of the application for details. This proposal is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** See Appendix 4 (Code of Practice) for measures to ensure the sustainability of harvesting activities and measures to ensure that direct, indirect, cumulative or in-combination effects do not occur.
59	Social Benefits Policy 2*	Proposals that increase the understanding and enjoyment of the marine environment (including its natural, historic and social value), or that promote conservation management and increased education and skills, should be supported.	**Explanation:** This application to hand harvest *A. nodosum* contributes to efforts aimed at enhancing the sustainability and economic resilience of rural, coastal and/or island communities, in turn, providing significant social benefits. The novel products that will be manufactured from *A. nodosum* will also have immense

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
			societal benefits. The use of traditional methods to harvest *A. nodosum* also has significant social and ecological value with respect to the marine environment. See main text of the application for details. This proposal is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** See Appendix 4 (Code of Practice) for measures to ensure the sustainability of harvesting activities and measures to ensure that direct, indirect, cumulative or in-combination effects do not occur.
60	Sport and Recreation Policy 1*	Proposals that promote sustainable development of water-based sports and marine recreation, while enhancing community health, wellbeing and quality of life, should be supported, provided that due consideration is given to environmental carrying capacities and tourism pressures.	**Explanation:** As outlined above for Access Policy 1, hand harvesting of *A. nodosum* is compatible with and will not impact on tourism, sport and recreation. This is outlined in the assessment in Appendix 7 (sections 3(a)(i) and 3(b)(i)). This application will not adversely impact on tourism, sport and recreation and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly with tourism, sport and recreation, and that no cumulative or in-combination effects arise (see Appendix 4 for details including Section 8. Tourism, sport and recreation).
61	Sport and Recreation Policy 2*	Proposals should demonstrate the following in relation to potential impact on recreation and tourism: • The extent to which the proposal is likely to adversely impact sports clubs and other recreational users, including the extent to which proposals may interfere with facilities or other physical infrastructure. • The extent to which any proposal interferes with access to and along the shore, to the water, use of the resource for recreation or	**Explanation:** As above for Sport and Recreation Policy 1, hand harvesting of *A. nodosum* is compatible with and will not impact on tourism, sport and recreation. This application will not adversely impact on sport and recreation and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly with

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		tourism purposes and existing navigational routes or navigational safety. • The extent to which the proposal is likely to adversely impact on the natural environment.	tourism, sport and recreation, and that no cumulative or in-combination effects arise (see Appendix 4).
62	Sport and Recreation Policy 3*	Opportunities to promote inclusive development of water-based sports and marine recreation should be supported, where appropriate and at the applicable scale, with a focus on facilities for people with disabilities.	**Explanation:** As above for Sport and Recreation Policy 1, hand harvesting of *A. nodosum* is compatible with and will not impact on tourism, sport and recreation. This application will not adversely impact on sport and recreation and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly with tourism, sport and recreation, and that no cumulative or in-combination effects arise (see Appendix 4).
63	Sport and Recreation Policy 4*	Proposals that improve access to marine and coastal resources for tourism activities, and sport and recreation should be supported, where appropriate, at the applicable scale and aligned with existing development plans.	**Explanation:** As above for Sport and Recreation Policy 1, hand harvesting of *A. nodosum* is compatible with and will not impact on tourism, sport and recreation. This application will not adversely impact on tourism, sport and recreation and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly with tourism, sport and recreation, and that no cumulative or in-combination effects arise (see Appendix 4).
64	Sport and Recreation Policy 5*	Proposals should seek to enhance water safety through provision of appropriate International Organization for Standardization (ISO) and European Committee for Standardization (CEN) compliant safety signage. In general the safety of persons should be a key consideration for planners and due consideration should be given to best practice guidance for marine and coastal recreation areas endorsed by the Visitor Safety in the Countryside Group.	**Explanation:** As above for Sport and Recreation Policy 1, hand harvesting of *A. nodosum* is compatible with and will not impact on tourism, sport and recreation. This application will not adversely impact on sport and recreation and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur.

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
			Control Measures: Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly with tourism, sport and recreation, and that no cumulative or in-combination effects arise (see Appendix 4).
65	Telecommunications Policy 1*	Proposals that guarantee existing and future international telecommunications connectivity which is critically important to support the future needs of society, Government, the provision of Public Services and enterprise in Ireland, should be supported.	**Explanation:** Hand harvesting of *A. nodosum* will not impact on Telecommunications Policy 1. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.
66	Telecommunications Policy 2*	Preference should be given to proposals where evidence is provided of an integrated approach to development and activity, such as the bundling of cables (electricity and communications) where suitable, as well as pipelines for multiple activities, to minimise impacts on the marine environment, infrastructures and other users. Compatibility should be achieved, in order of preference, through: a) avoiding, or b) minimising, or c) mitigating adverse impacts. d) If it is not possible to mitigate significant adverse impacts, proposals should set out the reasons for proceeding.	**Explanation:** Hand harvesting of *A. nodosum* will not impact on Telecommunications Policy 2. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.
67	Telecommunications Policy 3*	Preference should be given to proposals that protect submarine cables whilst achieving successful seabed user coexistence, such as the bundling of cables (electricity and communications) as well as pipelines for multiple activities where suitable. Proposals should specify if separate access to cables for the purposes of repair and maintenance is required. With regard to decommissioning redundant submarine cables, a risk-based approach should be applied with consideration given to cables being left in situ where	**Explanation:** Hand harvesting of *A. nodosum* will not impact on Telecommunications Policy 3. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		this would minimise significant impacts on the physical, natural, societal, historic, and economic value of the area.	
68	Telecommunications Policy 4*	Proposals that ensure and enhance connectivity of Ireland's rural and island communities to high quality telecommunications networks should be supported.	**Explanation:** Hand harvesting of *A. nodosum* will not impact on Telecommunications Policy 4. This proposal is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Mitigation not required.
69	Tourism Policy 1*	Where appropriate, proposals enabling, promoting or facilitating sustainable tourism and recreation activities, particularly where this creates diversification or additional utilisation of related facilities beyond typical usage patterns, should be supported.	**Explanation:** As above for Sport and Recreation Policy 1, hand harvesting of *A. nodosum* is compatible with and will not impact on tourism, sport and recreation. This application will not adversely impact on sport and recreation and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly with tourism, sport and recreation, and that no cumulative or in-combination effects arise (see Appendix 4).
70	Tourism Policy 2*	Proposals must identify possible impacts on tourism. Where a potential significant impact upon tourism is identified it should be demonstrated how the potential negative consequences to tourism in communities will be minimised. This must include assessment of how the benefits of proposals are not outweighed by potential negative impacts.	**Explanation:** As above for Sport and Recreation Policy 1, hand harvesting of *A. nodosum* is compatible with and will not impact on tourism, sport and recreation. This application will not adversely impact on sport and recreation and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly with tourism, sport and recreation, and that no cumulative or in-combination effects arise (see Appendix 4).
71	Tourism Policy 3*	Proposals for tourism development should seek to optimise facilities and use of space by taking a cross-sectoral development approach that provides for multiple activities, whilst minimising the extent to	**Explanation:** As above for Sport and Recreation Policy 1, hand harvesting of *A. nodosum* is compatible with and will not impact on tourism, sport and recreation. This application will not adversely

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		which the proposal is likely to adversely impact on the natural environment.	impact on tourism, sport and recreation and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities do not impact directly or indirectly with tourism, sport and recreation, and that no cumulative or in-combination effects arise (see Appendix 4).
72	Transboundary Policy 1*	Proposals that have transboundary impacts beyond the maritime area, on either the terrestrial environment or neighbouring international jurisdictions, must show evidence of consultation with the relevant public authorities, including terrestrial planning authorities and other country authorities. Proposals should consider transboundary impacts throughout the lifetime of the proposed activity.	**Explanation:** Hand harvesting of *A. nodosum* will not impact on Transboundary Policy 1. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.
73	Transmission Policy 1*	Subject to the appropriate environmental assessments, electricity transmission proposals that maintain or improve the security and diversity of Ireland's energy supply should be supported, including interconnectors, relevant EU Projects of Common Interest (PCIs), and projects in receipt of relevant alternative EU priority energy infrastructure classification provided for by the EU TEN-E regulations. This should include development of the offshore transmission system and connection with the onshore transmission system necessary to meet the Government's target of 5 GW of offshore renewables by 2030, as well as development of associated transmission system / interconnector infrastructure for hybrid offshore projects, connecting offshore renewable energy installations with Ireland and one or more other electricity transmission systems.	**Explanation:** Hand harvesting of *A. nodosum* will not impact on Transmission Policy 1. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
74	Transmission Policy 2*	Proposals for activities that are in or could affect energy transmission proposals in sites held under a permission or that are subject to an ongoing permitting or consenting process for energy transmission proposals should demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate adverse impacts, or d) if it is not possible to mitigate significant adverse impacts, proposals should set out the reasons for proceeding.	**Explanation:** Hand harvesting of *A. nodosum* will not impact on Transmission Policy 2. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.
75	Transmission Policy 3*	Decisions on transmission developments should be informed by consideration of space required for other activities of national importance described in the NMPF.	**Explanation:** Hand harvesting of *A. nodosum* will not impact on Transmission Policy 3. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.
76	Transmission Policy 4*	Where possible, opportunities for land-based, coastal infrastructure that is critical to and supports energy transmission should be prioritised in plans and policies. Designation of land-based zones for the purposes of co-ordination and integration with relevant Marine Plans must be considered, where appropriate.	**Explanation:** Hand harvesting of *A. nodosum* will not impact on Transmission Policy 4. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.
77	Transmission Policy 5*	Proposals for construction or operation activities within one nautical mile of either of the two existing natural gas interconnector pipelines shall be avoided. If construction or operation activities are proposed to take place within one nautical mile of either of the two existing natural gas interconnector pipelines, the views of Gas Networks Ireland in relation to how such activities could impact the pipelines shall be taken into account and either appropriate mitigation measures put in place or the proposed activities altered. If construction or operation activities involve the crossing of either	**Explanation:** Hand harvesting of *A. nodosum* will not impact on Transmission Policy 5. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		of the two existing natural gas interconnector pipelines by other pipelines or cables, the views of Gas Networks Ireland in relation to how such activities could impact the pipelines shall be taken into account and either appropriate mitigation measures be put in place or the proposed activities altered.	
78	Transmission Policy 6*	Subject to required assessments for the protection of the environment, and only where in keeping with the outcome of the review of the security of energy supply of Ireland's electricity and natural gas systems (which is being carried out by Department of the Environment, Climate and Communications), and not involving the importation of fracked gas, additional proposals for natural gas transmission/import infrastructure should be supported.	**Explanation:** Hand harvesting of *A. nodosum* will not impact on Transmission Policy 6. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Mitigation not required.
79	Underwater Noise Policy 1*	Proposals must take account of spatial distribution, temporal extent, and levels of impulsive and / or continuous sound (underwater noise) that may be generated and the potential for significant adverse impacts on marine fauna. Where the potential for significant impact on marine fauna from underwater noise is identified, a Noise Assessment Statement must be prepared by the proposer of development. The findings of the Noise Assessment Statement should demonstrably inform determination(s) related to the activity proposed and the carrying out of the activity itself. The content of the Noise Assessment Statement should be relevant to the particular circumstances and must include: • Demonstration of compliance with applicable legal requirements, such as necessary assessment of proposals likely to have underwater noise implications, including but not limited to: ∘ Appropriate Assessment (AA); ∘ Environmental Impact Assessment (EIA); ∘ Strategic Environmental Assessment (SEA); ∘ Specific response to 'strict protection' requirements of Article 12 of the Habitats Directive in relation to certain	**Explanation:** As outlined for Environmental – Ocean Health Policy 1 above, this application aligns with and is compatible with NMPF policies in relation to Biodiversity, Non-Indigenous Species, Water Quality, Sea-floor and Water Column Integrity, Marine litter and Underwater Noise. This is outlined in the assessment in Appendix 5 and Appendix 7 of this application. This application will not adversely impact on Underwater Noise Policy 1 and is unlikely to give rise to LSEs. In combination or cumulative effects are unlikely to occur. **Control Measures:** Measures are in place to ensure that hand harvesting activities are sustainable and do not negatively impact on NMPF policies and that direct, indirect, cumulative or in-combination effects do not occur. See Appendix 4, Code of Practice, and the Natura Impact Statement (NIS) for details.

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		species listed in Annex IV of the Directive; and ◦ Species protected under the Wildlife Acts. • An assessment of the potential impact of the development or use on the affected species in terms of environmental sustainability; • Demonstration that significant adverse impacts on marine fauna resulting from underwater noise will, in order of preference and in accordance with legal requirements be: a) avoided, b) minimised, or c) mitigated, or d) if it is not possible to mitigate significant adverse impacts on marine fauna, the reasons for proceeding must be set out. This policy should be included as part of statutory environmental assessments where such assessments are required.	
80	Wastewater Treatment and Disposal Policy 1*	Proposals by Irish Water related to the treatment and disposal of wastewater that: i) service the social and economic development of the country under the National Planning Framework; ii) resolve environmental issues at priority areas identified by the EPA; iii) contribute to the realisation of the objectives of: • Ireland's River Basin Management Plan 2018 – 2021 • The Water Services Policy Statement 2018 – 2025 • Marine Strategy Framework Directive 2012 - 2020 should be supported, provided they fully meet the environmental safeguards contained within relevant authorisation processes.	**Explanation:** Hand harvesting of *A. nodosum* will not impact on Wastewater Treatment and Disposal Policy 1. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting activities are sustainable. See Appendix 4, Code of Practice, for measures to ensure that harvesting does not occur in the vicinity of sewage outfalls, and that direct, indirect, cumulative or in-combination effects do not occur.
81	Wastewater Treatment and Disposal Policy 2*	Proposals that have the potential to significantly adversely affect existing and planned wastewater management and treatment infrastructure where a consent or authorisation or lease has been granted or formally applied for by Irish Water should not be authorised unless:	**Explanation:** Hand harvesting of *A. nodosum* will not impact on Wastewater Treatment and Disposal Policy 2. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs.

No.	Policy area	Full Policy	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		• compatibility with the existing, authorised, proposed or otherwise identified in consultations with Irish Water activity, can be satisfactorily demonstrated; • the proposal is clearly of strategic or national importance. Where possible, proposals that may affect Irish Water activities or plans should engage with Irish Water at the earliest available opportunity. Compatibility should be achieved, in order of preference, through: a) avoiding adverse impacts on those activities; and / or b) minimising impacts where they cannot be avoided; and / or c) mitigating impacts where they cannot be minimised.	**Control Measures:** Measures are in place to ensure that hand harvesting activities are sustainable. See Appendix 4, Code of Practice, for measures to ensure that harvesting does not occur in the vicinity of sewage outfalls, and that direct, indirect, cumulative or in-combination effects do not occur.
82	Water Quality Policy 1*	Proposals that may have significant adverse impacts upon water quality, including upon habitats and species beneficial to water quality, must demonstrate that they will, in order of preference and in accordance with legal requirements: a) avoid, b) minimise, or c) mitigate significant adverse impacts.	**Explanation:** Hand harvesting of *A. nodosum* will not impact on Water Quality Policy 1. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting activities are sustainable. See Appendix 4, Code of Practice, for measures to ensure that harvesting does not occur in the vicinity of sewage outfalls, and that direct, indirect, cumulative or in-combination effects do not occur.
83	Water Quality Policy 2*	Proposals delivering improvements to water quality, or enhancing habitats and species, which can be of benefit to water quality, should be supported.	**Explanation:** Hand harvesting of *A. nodosum* will not impact on Water Quality Policy 2. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting activities are sustainable. See Appendix 4, Code of Practice, for measures to ensure that harvesting does not occur in the vicinity of sewage outfalls, and that direct, indirect, cumulative or in-combination effects do not occur.

(c) Marine activities/Activities Map:

Marine activities may apply to any area within the Maritime Area, with particularly focus on Kenmare River SAC.

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
1	Aquaculture	See below.
(a)	Licensed sites	See aquaculture policies 1, 2 and 3 above.
(b)	Fishery order sites	Not applicable to Kenmare River SAC
2	Biodiversity	See biodiversity policies 1, 2, 3 and 4 above.
(a)	Common dolphin range	**Explanation:** Hand harvesting of *A. nodosum* is unlikely to affect the Common Dolphin. Hand harvesting of *A. nodosum* occurs in the intertidal zone and has no spatial overlap with the Common Dolphin, which is pelagic and generally occurs well out at sea and in waters of the continental shelf. The dietary requirements of Common Dolphin are broad and include a range of fish and invertebrate species that occur in subtidal waters, none of which are reliant on or form obligate relationships with *A. nodosum* during early-life, juvenile, larvae, nursery or spawning stages or require *A. nodosum* for fulfilling feeding functions. There are no physical, chemical or biological hazards associated with *A. nodosum* harvesting that could impact on the Common Dolphin. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** None required. However, measures are in place to ensure that hand harvesting activities are sustainable, environmentally safe navigation methods are employed and that marine mammals are not impacted or disturbed. Measures are also in place to prevent impacts on fish and invertebrates (see Appendix 4, Code of Practice).
(b)	Common dolphin distribution	
(c)	Bottlenose dolphin range	**Explanation:** Hand harvesting of *A. nodosum* is unlikely to affect the Bottlenose Dolphin. Hand harvesting of *A. nodosum* occurs in the intertidal zone and has no spatial overlap with the Bottlenose Dolphin which generally occurs in inshore waters, deep coastal waters and shallow waters. The dietary requirements of Bottlenose Dolphin are broad and include a range of fish and invertebrate species that occur in subtidal waters, none of which are reliant on or form obligate relationships with *A. nodosum* during early-life, juvenile, larvae, nursery or spawning stages or require *A. nodosum* for fulfilling feeding functions. There are no physical, chemical or biological hazards associated with *A. nodosum* harvesting that could impact on the Bottlenose Dolphin. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs.
(d)	Bottlenose dolphin distribution	

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		Control Measures: None required. However, measures are in place to ensure that hand harvesting activities are sustainable, environmentally safe navigation methods are employed and that marine mammals are not impacted or disturbed. Measures are also in place to prevent impacts on fish and invertebrates (see Appendix 4, Code of Practice).
(e)	Leatherback turtle range	**Explanation:** Hand harvesting of *A. nodosum* is unlikely to affect the Leatherback turtle. Hand harvesting of *A. nodosum* occurs in the intertidal zone and has no spatial overlap with the Leatherback turtle which generally inhabits open seas and waters up to 1,200 meters deep. Leatherback turtles are gelatinivores and their prey are not reliant on and do not form obligate relationships with *A. nodosum*. There are no physical, chemical or biological hazards associated with *A. nodosum* harvesting that could impact on the Leatherback turtle. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** None required. However, measures are in place to ensure that hand harvesting activities are sustainable, environmentally safe navigation methods are employed and that other marine species are not impacted or disturbed (see Appendix 4, Code of Practice).
(f)	Leatherback turtle distribution	
(g)	Seabird Breeding distribution - Gannet	**Explanation:** It is unlikely that Gannet will be impacted by *A. nodosum* harvesting as: (a) It nests on islands off the coast. (c) It winters at sea. (d) There is no significant risk of harvest activities impacting on feeding source or habitat. In addition, breeding colonies are located in the vicinity of Dursey Island, an area where harvesting will not take place. This is addressed further in the assessment in Appendix 6. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** None required. However, a range of measures to ensure birds are not impacted by hand harvesting are outlined in Appendix 4, Code of Practice.
(h)	Seabird Breeding distribution - Puffin	**Explanation:** It is unlikely that Puffin will be impacted by *A. nodosum* harvesting as Puffin is found in areas outside the *A. nodosum* zone and thus, disturbance events will not occur. There is no significant risk of harvest activities impacting on feeding source or habitat. This is addressed further in the assessment in Appendix 6. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** None required. However, a range of measures to ensure birds are not impacted by hand harvesting are outlined in Appendix 4, Code of Practice.

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
(i)	Seabird Breeding distribution - Kittiwake	**Explanation:** It is unlikely that Kittiwake will be impacted by *A. nodosum* harvesting as the species occupies a broad range of coastal habitats and is not limited to the intertidal zone where harvest activities will occur. There is no significant risk of harvesting activities impacting on feeding source or habitat. In addition, breeding colonies are located in the vicinity of Dursey Island, an area where harvesting will not take place and other areas such as steep sea cliffs where *A. nodosum* does not grow and will not be harvested. This is addressed further in the assessment in Appendix 6. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** None required. However, a range of measures to ensure birds are not impacted by hand harvesting are outlined in Appendix 4, Code of Practice.
(j)	Harbour seal distribution	**Explanation:** Contact with harbour seals at haul out sites will be minimal as harvest will not be permitted at sensitive breeding and moulting haul out sites at sensitive times of year, (b) for sites occupied all year round by harbour seals, harvest will only take place between during the resting period between October to April and with harvesters required to confirm absence of seals at resting sites prior to harvesting, and (c) boats and vessels will also operate in a manner known to least affect seal behaviour. Contact with harbour seals will also be reduced as harvesters will avoid sites where tourism-related activity takes place in the vicinity of haul out sites at sensitives times of the year. The likelihood of cumulative or in-combination effects arising as a consequence of harvesting taking place in conjunction with other activities is low. This is addressed further in the assessment in Appendix 5 and Appendix 7. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** A range of measures are in place to ensure that harbour seals are not directly or indirectly impacted by hand harvesting and that no cumulative or in-combination effects arise. See Appendix 4, Code of Practice, for details.
(k)	Grey seal distribution	**Explanation:** Hand harvesting of *A. nodosum* is unlikely to affect grey seal distribution. The dietary requirements of Grey seal are broad and include a range of fish and invertebrate species, none of which are reliant on or form obligate relationships with *A. nodosum* during early-life, juvenile, larvae, nursery or spawning stages or require *A. nodosum* for fulfilling feeding functions. There are no physical, chemical or biological hazards associated with *A. nodosum* harvesting that could impact on Grey seals or their distribution. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** None required. However, measures are in place to ensure that hand harvesting activities are sustainable, environmentally safe navigation methods are employed and that marine mammals such as grey seals are not impacted or disturbed. Measures are also in place to prevent impacts on fish and invertebrates (see Appendix 4, Code of Practice).
3	Climate change	See climate change policy no. 1 and 2 above.
(a)	Main coastal town	See climate change policy no. 1 and 2 above.

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
(b)	Contribution to carbon sequestration.	See climate change policy no. 1 and 2 above.
4	Defence and security	See Defence and Security Policy 1 above.
(a)	Danger and restricted areas that coincide with marine and coastal areas only.	See Defence and Security Policy 1 above.
(b)	Haulbowline Naval Base	See Defence and Security Policy 1 above.
5	Employment	See employment Policy 1 above.
(a)	Electoral districts and marine related businesses	See employment Policy 1 above.
6	Energy -offshore renewable	See Offshore Renewable Energy Policies above.
(a)	Atlantic Marine Energy test site	**Explanation:** Atlantic Marine Energy test site is not located in the proposed license area. There is no spatial overlap between hand harvesting and this test site. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** None required.
(b)	Energy and Buoy infrastructure	**Explanation:** Energy and Buoy infrastructure is not located in the proposed license area. There is no spatial overlap between hand harvesting and Energy and Buoy Infrastructure and in combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** None required.
(c)	Wind farms	**Explanation:** No wind farms are located in the proposed license area. There is no spatial overlap between hand harvesting and wind farms. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** None required.
7	Energy - Petroleum	See employment Policy 1 and 2 above.
(a)	Exploration well	**Explanation:** No exploration wells are located in the proposed license area. There is no spatial overlap between hand harvesting and exploration wells. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** None required.

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
(b)	Offshore gas pipelines	**Explanation:** No offshore gas pipelines are located in the proposed license area. There is no spatial overlap between hand harvesting and offshore gas pipelines. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** None required.
(c)	Current authorisations	**Explanation:** No current authorisations (petroleum lease, lease undertaking, exploration licenses, licensing options) are located in the proposed license area. There is no spatial overlap between hand harvesting and current authorisations. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** None required.
8	Fisheries - effort	See Fisheries Policy 1 to 6 above.
(a)	Beam trawl fishing effort	**Explanation:** Beam trawl fishing effort is limited to subtidal areas/community types where *A. nodosum* does not grow. There is no spatial overlap between Beam trawl fishing effort and intertidal reef community complex and no spatial overlap between hand harvesting and Beam trawl fishing effort. In combination or cumulative effects are unlikely to occur. See Fisheries Policies 1 to 6 above for details. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice).
(b)	Dredge trawl fishing effort	**Explanation:** Dredge trawl fishing effort is limited to subtidal areas/community types where *A. nodosum* does not grow. There is no spatial overlap between dredge trawl fishing and intertidal reef community complex and no spatial overlap between hand harvesting and dredge trawl fishing. In combination or cumulative effects are unlikely to occur. See Fisheries Policies 1 to 6 above and Appendix 7 for details. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice).
(c)	Pelagic trawl effort	**Explanation:** Pelagic trawl effort is limited to subtidal areas/community types where *A. nodosum* does not grow. There is no spatial overlap between Pelagic trawl and intertidal reef community complex and no spatial overlap between hand harvesting and Pelagic trawl. In combination or cumulative effects are unlikely to occur. See Fisheries Policies 1 to 6 above and Appendix 7 for details. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice).

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
(d)	Long line effort	**Explanation:** Long line is limited to subtidal areas/community types where *A. nodosum* does not grow. There is no spatial overlap between Long line effort and intertidal reef community complex and no spatial overlap between hand harvesting and Long line effort. In combination or cumulative effects are unlikely to occur. See Fisheries Policies 1 to 6 above and Appendix 7 for details. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice).
(e)	Pot fishing effort	**Explanation:** Pot fishing effort is limited to areas/community types where *A. nodosum* does not grow. There is no spatial overlap between Pot fishing and intertidal reef community complex and no spatial overlap between hand harvesting and Pot fishing: • Potting for shrimp: Occurs throughout the mid to inner regions of the bay, limited to subtidal areas/community types where *A. nodosum* does not grow (there is no spatial overlap with intertidal reef community complex). • Potting for prawns: Occurs throughout the mid to inner regions of the bay, limited to subtidal areas/community types where *A. nodosum* does not grow (there is no spatial overlap with intertidal reef community complex). • Potting for crab and lobster: Occurs throughout the mid to inner regions of the bay, limited to subtidal areas/community types where *A. nodosum* does not grow (there is no spatial overlap with intertidal reef community complex). In combination or cumulative effects between hand harvesting and above activities are unlikely to occur. See Fisheries Policies 1 to 6 above and Appendix 7 for details. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice).
(f)	Seines fishing effort	**Explanation:** Seines fishing effort is limited to subtidal areas/community types where *A. nodosum* does not grow. There is no spatial overlap between Seines fishing effort and intertidal reef community complex and no spatial overlap between hand harvesting and Seines fishing effort. In combination or cumulative effects are unlikely to occur. See Fisheries Policies 1 to 6 above and Appendix 7 for details. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice).
(g)	Gill net effort	**Explanation:** Gill net effort is limited to subtidal areas/community types where *A. nodosum* does not grow. There is no spatial overlap between Gill net effort and intertidal reef community complex and no spatial overlap between hand harvesting and Gill net effort. In combination or cumulative effects are unlikely to occur. See Fisheries Policies 1 to 6 above and Appendix 7 for details. This proposal is unlikely to give rise to LSEs.

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		Control Measures: Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice).
(h)	Otter trawl effort	**Explanation:** Otter trawl effort is limited to subtidal areas/community types where *A. nodosum* does not grow. There is no spatial overlap between Otter trawl effort and intertidal reef community complex and no spatial overlap between hand harvesting and Otter trawl effort. In combination or cumulative effects are unlikely to occur. See Fisheries Policies 1 to 6 above and Appendix 7 for details. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice).
9	Fisheries species	
(a)	Megrim spawning and nursery grounds	**Explanation:** Hand harvesting of *A. nodosum* is unlikely to affect Megrim spawning and nursery grounds, which occur in deep, subtidal offshore waters (see Appendix 10). Megrim does not have an obligate relationship with *A. nodosum*: • **Distribution:** Megrim is found between 100-700m. • **Spawning Areas:** *A. nodosum* is not a spawning ground. • **Nursery Areas:** *A. nodosum* is not a nursery ground. • **Food source:** Megrim occupies deep waters. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice).
(b)	Megrim spawning grounds	As above for Megrim spawning and nursery grounds.
(c)	Megrim nursery grounds	As above for Megrim spawning and nursery grounds.
(d)	Whiting spawning and nursery grounds	**Explanation:** Hand harvesting of *A. nodosum* is unlikely to affect whiting spawning and nursery grounds (see Appendix 10). Whiting does not have an obligate relationship with *A. nodosum*: • **Distribution:** Whiting is found between 0-100m. • **Spawning Areas:** *A. nodosum* is not a spawning ground. • **Nursery Areas**: The nursery ground is broad and preference is shown for sand and mud substratum. Larvae are observed offshore.

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		• **Food source:** Whiting has a wide distribution including deep waters of >30m. Whiting is usually found near mud and gravel bottoms, but also above sand and rock. Juveniles mainly occupy waters with sand and mud substratum. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice).
(e)	Whiting spawning grounds	As above for Whiting spawning and nursery grounds.
(f)	Whiting nursery grounds	As above for Whiting spawning and nursery grounds.
(g)	Cod spawning and nursery grounds	**Explanation:** Hand harvesting of *A. nodosum* is unlikely to affect Cod spawning and nursery grounds (see Appendix 10). Cod does not have an obligate relationship with *A. nodosum* and utilizes a range of non-*A. nodosum* habitats: • **Distribution:** Cod is found from the shoreline down to depths of 600m. • **Spawning Area:** Spawning is pelagic and takes place offshore. The spawning areas of cod are not located in Kenmare Bay. • **Nursery Area:** ➢ The main nursery areas in Ireland are in southeastern and northeast regions. ➢ Nursery area are broad and includes gravel, pebbles, cobble, maerl, seagrass beds and rocky shores. ➢ Juvenile cod are most abundant in shallow, sheltered areas where the seabed is composed of gravel and pebbles that contain maerl. ➢ Juvenile cod show preference and occur at higher levels in gravel/pebble areas with maerl compared to boulder/cobble substrate containing algae. • **Food source:** Juvenile cod feed on plankton which is not restricted to the intertidal zone. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice).
(h)	Cod spawning grounds	As above for cod spawning and nursery grounds.
(i)	Cod nursery grounds	As above for cod spawning and nursery grounds.

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
(j)	Atlantic haddock spawning and nursery grounds	**Explanation:** Hand harvesting of *A. nodosum* is unlikely to affect Atlantic haddock spawning and nursery grounds (see Appendix 10). Atlantic haddock does not have an obligate relationship with *A. nodosum*: • **Distribution:** Atlantic haddock is found at depths ranging from 10m to 450 m. • **Spawning Area:** *A. nodosum* is not a spawning ground. The spawning areas for haddock are not located in Kenmare Bay. Haddock remains in deep water to spawn, usually in depths of 75-200m. • **Nursery Area**: The nursery areas for haddock are not located in Kenmare Bay. Juvenile haddock occupy waters with sand and mud substratum. • **Food source:** *A. nodosum* is not a feeding area. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice).
(k)	Atlantic haddock spawning grounds	As above for Atlantic haddock spawning and nursery grounds.
(l)	Atlantic haddock nursery grounds	As above for Atlantic haddock spawning and nursery grounds.
(m)	Atlantic mackerel spawning and nursery grounds	**Explanation:** Hand harvesting of *A. nodosum* is unlikely to affect Atlantic mackerel spawning and nursery grounds (see Appendix 10). Atlantic mackerel does not have an obligate relationship with *A. nodosum*: • **Distribution:** Atlantic mackerel is a deep water fish ranging from shallow water to ~1000m • **Spawning Areas:** *A. nodosum* is not a spawning ground. Eggs are pelagic, floating freely in the water column. • **Nursery Areas:** *A. nodosum* is not a nursery ground. Nursery is shallow open water. • **Food source:** *A. nodosum* is not a feeding ground. Mackerel have a varied diet and do not feed exclusively in intertidal areas. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice).
(n)	Atlantic mackerel spawning grounds	As above for Atlantic mackerel spawning and nursery grounds.

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
(o)	Atlantic mackerel nursery grounds	As above for Atlantic mackerel spawning and nursery grounds.
(p)	Horse mackerel spawning and nursery grounds	**Explanation:** Hand harvesting of *A. nodosum* is unlikely to affect Horse mackerel spawning and nursery grounds (see Appendix 10). Horse mackerel does not have an obligate relationship with *A. nodosum*: • **Distribution:** Horse mackerel is found from shallow water areas to over 200m. • **Spawning Areas:** *A. nodosum* is not a spawning ground. Spawning area is not located in Kenmare Bay, and is located off the coast. • **Nursery Areas:** *A. nodosum* is not a nursery ground. Nurseries are observed to be widespread around Ireland and not localised to Kenmare Bay. • **Food source:** *A. nodosum* is not a feeding ground. Mackerel have a varied diet and do not feed exclusively in *A. nodosum* areas. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice).
(q)	Horse mackerel spawning grounds	As above for Horse mackerel spawning and nursery grounds.
(r)	Horse mackerel nursery grounds	As above for Horse mackerel spawning and nursery grounds.
(s)	Atlantic hake spawning and nursery grounds	**Explanation:** Hand harvesting of *A. nodosum* is unlikely to affect Atlantic hake spawning and nursery grounds (see Appendix 10). Atlantic hake does not have an obligate relationship with *A. nodosum*: • **Distribution:** Atlantic hake is found between 75-400m. • **Spawning Area:** *A. nodosum* is not a spawning ground. Spawning areas are not located in Kenmare Bay. • **Nursery Area:** *A. nodosum* is not a nursery ground. • **Food source:** *A. nodosum* is not a feeding ground. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice).

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
(t)	Atlantic hake spawning grounds	As above for Atlantic hake spawning and nursery grounds.
(u)	Atlantic hake nursery grounds	As above for Atlantic hake spawning and nursery grounds.
(v)	White belly angler monk nursery grounds	**Explanation:** Hand harvesting of *A. nodosum* is unlikely to affect Anglerfish/ monkfish spawning and nursery grounds (see Appendix 10). Anglerfish/ monkfish does not have an obligate relationship with *A. nodosum*: • **Distribution:** Found between 20-1000m. • **Spawning Areas:** *A. nodosum* is not a spawning ground • **Nursery Areas:** *A. nodosum* is not a nursery ground. Nursery grounds are located along the outer reaches of Kenmare Bay and extend into deeper waters. Juveniles occur in shallow (<30m) and deep waters (>30m). • **Food source:** Feeds on fish and birds. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice).
(w)	Black belly angler monk nursery grounds	**Explanation:** Hand harvesting of *A. nodosum* is unlikely to affect Black-bellied anglerfish spawning and nursery grounds (see Appendix 10). Black-bellied anglerfish does not have an obligate relationship with *A. nodosum*: • **Distribution:** Deep water fish ranging from shallow waters to 650m. • **Spawning Areas:** *A. nodosum* is not a spawning ground. • **Nursery Areas:** *A. nodosum* is not a nursery ground. Nursery grounds are located in deeper waters beyond Kenmare River SAC. Juveniles occur in subtidal waters (>30m) with subtidal soft bottom and gravel coarse bottom. • **Food source:** *A. nodosum* is not a feeding ground. Black-bellied angler fish have a varied diet. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice).
(x)	Blue whiting spawning and nursery grounds	**Explanation:** Hand harvesting of *A. nodosum* is unlikely to affect Blue whiting spawning and nursery grounds (see Appendix 10). Blue whiting does not have an obligate relationship with *A. nodosum*:

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		• **Distribution:** Found between 150-1000m. • **Spawning Area:** *A. nodosum* is not a spawning ground. Spawning areas are not located in Kenmare Bay. Spawning occurs at depths of 180m to 360m. • **Nursery Area:** *A. nodosum* is not a nursery ground. The blue whiting nursery areas are not located in Kenmare Bay. • **Food source:** Diet is varied and includes species in deep waters beyond the intertidal zone. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice).
(y)	Blue whiting spawning grounds	As above for Blue whiting spawning and nursery grounds.
(z)	Blue whiting nursery grounds	As above for Blue whiting spawning and nursery grounds.
10	Fisheries - Ports, harvesting, distribution	See Ports, Harbours and Shipping Policies above.
(a)	Fishing port	See Ports, Harbours and Shipping Policies above. No fishing ports are located in the proposed license area.
(b)	Shellfish water directive	**Explanation:** *A. nodosum* harvesting will not give rise to negative effects on physical, chemical and microbiological parameters of relevance or pollution reduction programs for designated waters in Kenmare River SAC (this is outlined further in the assessments in Appendix 5 and Appendix 7). In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting activities do not give rise to pollution and do not impact directly or indirectly with aquaculture, and that no cumulative or in-combination effects on water quality arise (see Appendix 4, Code of Practice).
(c)	Periwinkle harvesting	**Explanation:** It is unlikely that periwinkle harvesting has significant effects in terms of trampling pressure. Potential risks associated with periwinkle harvesting are reductions in periwinkle population numbers due to their removal. As outlined in the assessments in Appendix 5 and Appendix 7, there is a remote potential for in-combination effects associated with *A. nodosum* hand harvest activities and existing periwinkle harvest activities. This proposal is unlikely to give rise to LSEs.

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		Control Measures: The standards developed as part of the Codes of Practice (Appendix 4) reduce the likelihood of any in combination effects associated with existing hand gathering of periwinkles activities. • Harvest of *A. nodosum*: Harvesters will be taught to leave between 8-12 inches of the crop behind. Cutting below 8 inches will be forbidden and could lead to disciplinary procedures. This standard will be monitored by the Resource Manager. This approach (a) avoids extensive removal of *A. nodosum* canopy coverage and damage to the ecosystem, (b) avoids interactions with or by-catch of dormant or resting periwinkles positioned at the base of the *A. nodosum* canopy and (c) ensures that on development into free-living forms, *L. littorea* species are able to settle and establish within the intact canopy. • *L. obtusata* eggs: Harvesters must work to avoid *A. nodosum* plants which contain visible *L. obtusata* egg masses. This is important to prevent harvest of viable eggs, thereby promoting maintenance of population size. • Do not harvest *Fucus*: *Fucus* content of harvested *A. nodosum* will be limited to no more than 10%, thus preventing removal of an additional canopy source which supports periwinkles and other species. • Take care not to co-harvest other species. Co-removal of amphipods, isopods, periwinkles or other Animalia identified post-harvest must be collected and returned to the water, where possible. • As a general policy, hand harvesters supplying BioAtlantis will avoid sites where periwinkle harvesting is observed to be taking place. This will be determined on a case-by-case basis. • As a general policy, BioAtlantis will work with other companies in Kenmare to prevent any potential in combination effects with our own activities.
(d)	Pot fishing (lobster, crab, nephrops, shrimp or whelk potting)	**Explanation:** Potting is primarily a subtidal activity. There is no spatial overlap between intertidal reef community complex and Lobster, crab, shrimp, whelk and nephrops potting. As there is no overlap between *A. nodosum* harvesting and potting, the risk of interactions is extremely low. Harvesting activities will be limited to the intertidal zone which prevents interactions from occurring. This is outlined further in the assessments in Appendix 5 and Appendix 7. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Ensure that seaweed harvesting only takes place in the intertidal zone and not in subtidal areas of relevance to fisheries activities such as potting (Lobster, crab, shrimp, whelk and nephrops), dredging (e.g. scallop, native oyster, cockle), trammel net fishing for bait, otter trawl, tangle net (crayfish), gillnet, mid-water trawl or other types fisheries activities. Activities in subtidal waters that are permitted will include site visits, transport and transfer of *A. nodosum* to pick up points. See Appendix 4 (Code of Practice) for further details.
(e)	Midwater trawl fishing	**Explanation:** Midwater trawl fishing is limited to subtidal areas/community types where *A. nodosum* does not grow (there is no spatial overlap with intertidal reef community complex). In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs.

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		Control Measures: Ensure that seaweed harvesting only takes place in the intertidal zone and not in subtidal areas of relevance to fisheries activities such as potting (Lobster, crab, shrimp, whelk and nephrops), dredging (e.g. scallop, native oyster, cockle), trammel net fishing for bait, otter trawl, tangle net (crayfish), gillnet, mid-water trawl or other types fisheries activities. Activities in subtidal waters that are permitted will include site visits, transport and transfer of *A. nodosum* to pick up points. See Appendix 4 (Code of Practice) for further details.
(f)	Net fishing	**Explanation:** Net fishing is limited to subtidal areas/community types where *A. nodosum* does not grow. There is no spatial overlap between Net fishing and intertidal reef community complex and no spatial overlap between hand harvesting and Net fishing. In combination or cumulative effects are unlikely to occur. See Fisheries Policies 1 to 6 above and Appendix 7 for details. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice).
(g)	Line fishing	**Explanation:** Line fishing is limited to subtidal areas/community types where *A. nodosum* does not grow. There is no spatial overlap between Line fishing and intertidal reef community complex and no spatial overlap between hand harvesting and Line fishing. In combination or cumulative effects are unlikely to occur. See Fisheries Policies 1 to 6 above and Appendix 7 for details. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice).
(h)	Dredge fishing	**Explanation:** Dredge fishing effort is limited to subtidal areas/community types where *A. nodosum* does not grow. There is no spatial overlap between dredge fishing and intertidal reef community complex and no spatial overlap between hand harvesting and dredge fishing. In combination or cumulative effects are unlikely to occur. See Fisheries Policies 1 to 6 above and Appendix 7 for details. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice).
(i)	Bottom trawl fishing	**Explanation:** Bottom trawl is limited to subtidal areas/community types where *A. nodosum* does not grow. There is no spatial overlap between Bottom trawl and intertidal reef community complex and no spatial overlap between hand harvesting and Bottom trawl. In combination or cumulative effects are unlikely to occur. See Fisheries Policies 1 to 6 above and Appendix 7 for details. This proposal is unlikely to give rise to LSEs.

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		Control Measures: Measures are in place to ensure that hand harvesting does not impact on fish, invertebrates and fisheries activities (see Appendix 4, Code of Practice).
(j)	Bivalve production areas	**Explanation:** According to the Marine Institute: • The likely overlap between these activities [intertidal seaweed harvesting] and intertidal shellfish culture is considered small as the (reef) habitat is not considered suitable for shellfish culture and low levels of this culture method overlaps this habitat… The level of transport across the intertidal area is unknown, but it is presumed that the routes are well defined Marine Institute (2019). • Hand harvest activities may exacerbate existing effects which are potentially associated with licensed aquaculture activities, e.g. disturbance at sites relevant to harbour seals. Overall the risk of such interactions is considered low (Marine Institute, 2014). This is outlined further in the assessments in Appendix 5 and Appendix 7. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on bivalve production areas/aquaculture, either directly or indirectly, and that no cumulative or in combination effects occur (see Appendix 4, Code of Practice).
11	Heritage assets	
(a)	Coastal built heritage sites	**Explanation:** *A. nodosum* harvesting will not impact on land based, coastal built heritage sites. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.
(b)	Historic coastal towns	**Explanation:** *A. nodosum* harvesting will not impact on Historic coastal towns, as they are absent from the proposed license area. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.
(c)	Ship wrecks in Irish waters - recorded year of loss	**Explanation:** There are a number of shipwrecks in Kenmare Bay. All are located in subtidal waters and will not be affected by hand harvesting in the intertidal zone. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
(d)	Coastal UNESCO World Heritage Sites.	**Explanation:** *A. nodosum* harvesting will not impact on UNESCO World Heritage Sites, as they are absent from the proposed license area. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.
(e)	Wild Atlantic Way Route.	**Explanation:** *A. nodosum* harvesting will not impact on land-based Wild Atlantic Way Routes and related activities (see the assessment in Appendix 7 for more details). In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.
(f)	Wild Atlantic Way Signature Discovery Points.	**Explanation:** *A. nodosum* harvesting will not impact on land-based Wild Atlantic Way Signature Discovery Points and related activities (see the assessment in Appendix 7 for more details). In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.
(g)	Causeway Coastal Route.	**Explanation:** *A. nodosum* harvesting will not impact on Causeway Coastal Routes, as they are absent from the proposed license area. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.
(h)	UNESCO Global Geoparks and Biospheres.	**Explanation:** *A. nodosum* harvesting will not impact on UNESCO Global Geoparks and Biospheres, as they are absent from the proposed license area. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.
12	Protected Marine Sites:	
(a)	Nature Reserves	**Explanation:** *A. nodosum* harvesting will not impact on land-based Nature Reserves (see the assessment in Appendix 7 for more details). In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.
(b)	Refuges for local fauna.	**Explanation:** *A. nodosum* harvesting will not take place at refuges for local fauna at Cow Rock or Bull Rock. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
(c)	RAMSAR Wetland Site	**Explanation:** *A. nodosum* harvesting will not impact on RAMSAR Wetland Sites, which are absent from the proposed license area. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.
(d)	Special Areas of Conservation	**Explanation:** This application to hand harvest *A. nodosum* supports the objectives for protected marine sites. This is outlined in the assessments in Appendix 5, Appendix 7 and the Natura Impact Statement accompanying this application. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** See Appendix 4 (Code of Practice) for measures to ensure the sustainability of harvesting activities and protection of marine sites and to ensure that activities do not impact directly or indirectly on protected sites, and that no cumulative or in-combination effects arise.
(e)	Special Protection Areas.	**Explanation:** This application to hand harvest *A. nodosum* supports the objectives for protected marine sites. This is outlined in the assessments in Appendix 5, Appendix 7 and the Natura Impact Statement accompanying this application. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** See Appendix 4 (Code of Practice) for measures to ensure the sustainability of harvesting activities and protection of marine sites and to ensure that activities do not impact directly or indirectly on protected sites, and that no cumulative or in-combination effects arise.
(f)	Natural Heritage Areas	**Explanation:** *A. nodosum* harvesting will not impact on Natural Heritage Areas, which are absent from the proposed license area. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.
(g)	Dublin Bay Biosphere Marine Zones	**Explanation:** N/A **Control Measures:** N/A
13	Ports, harbours and shipping	See below.
(a)	Ports of Ireland	**Explanation:** *A. nodosum* harvesting will not impact on Ports of Ireland, which are absent from the proposed license area. See Ports, Harbours and Shipping Policies above. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
(b)	Limits of Pilotage Districts	**Explanation:** *A. nodosum* harvesting will not impact on Limits of Pilotage Districts, which are absent from the proposed license area. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.
(c)	Popular Destination	**Explanation:** *A. nodosum* harvesting will not impact on 'Popular Destinations', which are absent from the proposed license area. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.
(d)	Frequently used Routes (300 gross tonnes and above).	**Explanation:** *A. nodosum* harvesting will not impact on Frequently used Routes (300 gross tonnes and above), which are absent from the proposed license area. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.
(e)	National Ferry Route	**Explanation:** *A. nodosum* harvesting will not impact on National Ferry Routes (e.g. Derrynane-Skelligs and Dursey Island). In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** See Appendix 4 (Code of Practice) for measures to ensure no interactions with ferry routes.
(f)	Limits of harbours	**Explanation:** *A. nodosum* harvesting will not impact on Limits of harbours, which are absent from the proposed license area. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.
(g)	Ferry port.	**Explanation:** *A. nodosum* harvesting will not impact on Ferry ports, which are absent from the proposed license area. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.
(h)	Cargo and tanker density	**Explanation:** *A. nodosum* harvesting will not impact on Cargo and tanker density. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** See Appendix 4 (Code of Practice) for measures to ensure no interactions with cargo and tanker vessels.
(i)	Passenger vessel density	**Explanation:** *A. nodosum* harvesting will not impact on Passenger vessels. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs.

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		Control Measures: See Appendix 4 (Code of Practice) for measures to ensure no interactions with Passenger vessels.
14	Sport and recreation	See below.
(a)	Surfing	**Explanation:** *A. nodosum* harvesting will not impact on surfing as harvesting will not take place in these areas. This is outlined in the assessment in Appendix 7. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.
(b)	Blue flag beaches	**Explanation:** *A. nodosum* harvesting will not impact on surfing as harvesting will not take place at beaches. This is outlined in the assessment in Appendix 7. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.
(c)	Marinas	**Explanation:** Harvest will not take place at Derrynane. Activities associated with Star Marina are outlined in the assessment in Appendix 7. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure no in combination or cumulative effects with activities associated with Star Marina (outlined in the assessment in Appendix 7.) See Appendix 4 (Code of Practice) for measures to prevent interactions with tourism, sport and recreational activities.
(d)	Sailing density	**Explanation:** Activities associated with sailing are outlined in the assessment in Appendix 7. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Measures are in place to ensure no in combination or cumulative effects with activities associated with sailing (outlined in the assessment in Appendix 7.) See Appendix 4 (Code of Practice) for measures to prevent interactions.
15	Seafloor and water column integrity	See below.
(a)	Sea cliff	**Explanation:** *A. nodosum* harvesting will not impact on Sea cliff as harvesting will not take at these areas. This is outlined in the assessment in Appendix 5. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.
(b)	Subtidal sandbank	**Explanation:** *A. nodosum* harvesting will not impact on Subtidal sandbanks as harvesting will not take place at these areas. This is outlined in the assessment in Appendix 5. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
(c)	Benthic broad habitat type: Abyssal, Circalittoral coarse sediment, Circalittoral mixed sediment, Circalittoral mud, Circalittoral rock and biogenic reef, Circalittoral sand, Infralittoral coarse sediment, Infralittoral mixed sediment, Infralittoral mud, Infralittoral rock and biogenic reef, Infralittoral sand, Lower bathyal rock and biogenic reef, Lower bathyal sediment, Lower bathyal sediment or Lower bathyal rock and biogenic reef, Offshore circalittoral coarse sediment, Offshore circalittoral mixed sediment, Offshore circalittoral mud, Offshore circalittoral rock and biogenic reef, Offshore circalittoral sand, Unclassified, Upper bathyal rock and biogenic reef, Upper bathyal sediment, Upper bathyal sediment or Upper bathyal rock and biogenic reef.	**Explanation:** • The following habitats types are in subtidal waters and are unlikely to be directly impacted by hand harvesting of *A. nodosum* in the intertidal zone: Abyssal, Circalittoral coarse sediment, Circalittoral mixed sediment, Circalittoral mud, Circalittoral rock and biogenic reef, Circalittoral sand, Infralittoral coarse sediment, Infralittoral mixed sediment, Infralittoral mud, Infralittoral rock and biogenic reef, Infralittoral sand, Lower bathyal rock and biogenic reef, Lower bathyal sediment, Lower bathyal sediment or Lower bathyal rock and biogenic reef, Offshore circalittoral coarse sediment, Offshore circalittoral mixed sediment, Offshore circalittoral mud, Offshore circalittoral rock and biogenic reef, Offshore circalittoral sand, Upper bathyal rock and biogenic reef, Upper bathyal sediment, Upper bathyal sediment or Upper bathyal rock and biogenic reef. Seafloor and water column integrity is unlikely to be affected. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. • **Control Measures:** ➢ Measures are in place requiring that environmentally safe navigation techniques are employed to ensure protection of marine and coastal habitats in Kenmare River SAC, including estuarine mud, muddy-fine sand, intertidal sand, saltmarsh habitat, intertidal mobile sand, shingle, reef areas and bogland SAC areas occurring adjacent to the coast. ➢ Measures are in place to ensure that environmentally safe navigation techniques are employed when approaching the intertidal zone to avoid infralittoral habitats (e.g. mud, sand, coarse/mixed sediment, biogenic reef) that may be in the vicinity of the lower eulittoral zone . This is outlined in the Code of Practice (Appendix 4). ➢ For further details of these measures and other measures related to environmentally safe navigation, see Appendix 4.
(d)	Seabed substrate classification: Coarse sediment, mixed sediment, mud to muddy sand, rock, sand, unclassified substrate.	**Explanation:** The following substrate types are unlikely to be impacted by hand harvesting of *A. nodosum* in the intertidal zone: Coarse sediment, mixed sediment, mud to muddy sand, rock, sand, unclassified substrate. Seafloor and water column integrity is unlikely to be affected. This is outlined in the assessment in Appendix 5 and below. • **Control Measures:** ➢ Measures are in place to ensure the following substrates and marine habitat types are unaffected: - Zostera Community - Shingle - Maerl Dominated community

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		- Laminaria-dominated community complex - Intertidal reef community complex - Intertidal mobile sand community complex - Muddy fine sands dominated by polychaetes & A. filiformis community complex. - Fine to medium sand with crustaceans & polychaetes community complex. - Coarse sediment dominated by polychaetes community complex. The spatial overlap between the above and *A. nodosum* habitats is low or absent and continuous disturbance of each community type does not exceed an approximate area of 15% (as recommended by NPWS to ensure adherence to the EU commissions' requirements; see Table 1 in Appendix 4). In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. • **Control Measures:** Measures are also in place to ensure that infralittoral habitats in the vicinity of the lower eulittoral zone (i.e. mud, sand, coarse/mixed sediment, biogenic reef) are not affected, either directly or indirectly, and that no cumulative or in combination effects occur. See Appendix 4 (Code of Practice) for measures to ensure impacts on these substrate/habitat types.
(e)	Saltmarsh	• **Explanation:** Saltmarsh habitat is unlikely to be directly impacted by hand harvesting of *A. nodosum* in the intertidal zone. This is outlined in the assessment in Appendix 5 and Appendix 7. This proposal is unlikely to give rise to LSEs. • **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on saltmarsh habitat, either directly or indirectly, and that no cumulative or in combination effects occur (see Appendix 4, Code of Practice).
(f)	Dune	• **Explanation:** Dune habitat is unlikely to be directly impacted by hand harvesting of *A. nodosum* in the intertidal zone. Seafloor and water column integrity is unlikely to be affected. This is outlined in the assessment in Appendix 5 and Appendix 7. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. • **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on dune habitat, either directly or indirectly, and that no cumulative or in combination effects occur (see Appendix 4, Code of Practice).
(g)	Estuary	• **Explanation:** Estuary habitat is unlikely to be directly impacted by hand harvesting of *A. nodosum* in the intertidal zone, as measures are in place to ensure environmentally safe navigation methods are employed to prevent impacts on estuarine

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		substratum. Seafloor and water column integrity is unlikely to be affected. Other impacts on Estuary habitat are also considered unlikely. This is outlined in the assessment in Appendix 5 and Appendix 7. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. • **Control Measures:** Measures are in place to ensure that hand harvesting does not impact on Estuary habitat, either directly or indirectly, and that no cumulative or in combination effects occur (see Appendix 4, Code of Practice).
16	Seascape and landscape	See below.
(a)	Seascape coastal type	• **Explanation:** The likelihood of giving rise to impacts on seascape, landscape and visual disturbance is very low as (a) hand harvesting of seaweed is not novel and has a long established tradition along the west coast of Ireland (b) harvesting will take place on a sustainable basis and (c) measures are in place to prevent interactions between harvesting and recreation, sport and tourism-related activities. In addition, no infrastructure is involved in this application. This is outlined in the assessments in Appendix 5 and Appendix 7. Seascape character assessment 9 (SCA9) comprises an indented coastline of counties Kerry and Cork, including; Dingle, Iveragh, Beara, Sheep's Head and Mizen, and their intervening bays; Dingle Bay, Kenmare Bay (River), Bantry Bay, Dunmanus Bay and Roaringwater Bay (ref: Marine Institute (2020). SCA9 is considered to be dense (particularly around the Kenmare river) in licensed aquaculture sites (shellfish, finfish and seaweed), and businesses operators involved in providing angling tours (Kenmare Fishing Tours, The ROSA Sea Fishing and Scenic Tours). Given the sustainable nature of hand harvesting and the traditional methods employed, there will be no impacts on Regional Seascape Character Areas such as "SCA9 - Atlantic South West Rias, Bays and Islands" and it's aspects (including: boundaries and location, key characteristics, natural influences, cultural and social influences, art and folklore, perceptual influences vistas and views, sense of place, sounds and smells). In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. • **Control Measures:** Not required.
(b)	Seascape character area	As above for seascape coastal type.
17	Tourism	See below.
(a)	Main coastal city or town	• **Explanation:** There is no impact between hand harvesting and main coastal city or town. In combination or cumulative effects are unlikely to occur. This is outlined in the assessment in Appendix 7. • **Control Measures:** None required.

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
(b)	Discovery Point	**Explanation:** There is no impact between hand harvesting and discovery points. In combination or cumulative effects are unlikely to occur. This is outlined in the assessment in Appendix 7. This proposal is unlikely to give rise to LSEs. • **Control Measures:** None required.
(c)	Wild Atlantic way	• **Explanation:** There is no impact between hand harvesting and the Wild Atlantic way. In combination or cumulative effects are unlikely to occur. This is outlined in the assessment in Appendix 7. This proposal is unlikely to give rise to LSEs. • **Control Measures:** None required.
(d)	Accommodation hotspot type.	• **Explanation:** There is no impact between hand harvesting and Accommodation. In combination or cumulative effects are unlikely to occur. This is outlined in the assessment in Appendix 7. This proposal is unlikely to give rise to LSEs. • **Control Measures:** None required.
18	Water quality, wastewater treatment and disposal	
(a)	Raw sewage discharge points	• **Explanation:** There is no impact between hand harvesting and Raw sewage discharge points. In combination or cumulative effects are unlikely to occur. This is outlined in the assessment in Appendix 5. This proposal is unlikely to give rise to LSEs. • **Control Measures:** BioAtlantis will not harvest in areas near sewage outfalls or other sources of pollution. Moreover, senescing or decomposing seaweed will not be harvested.
(b)	Bathing water quality	• **Explanation:** There is no impact between hand harvesting and Bathing water quality. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. • **Control Measures:** None required.
(c)	Urban waste agglomerates failing EU water directive.	• **Explanation:** There is no impact between hand harvesting and Urban waste agglomerates failing EU water directive. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. • **Control Measures:** None required.
(d)	Rivers-Ireland	• **Explanation:** There is no impact between hand harvesting and Rivers-Ireland. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs.

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		• **Control Measures:** None required. Measures are in place to ensure no impact on river estuaries (see Appendix 4, Code of Practice).
(e)	Rivers-Northern Ireland	• **Explanation:** N/A • **Control Measures:** N/A
(f)	Lakes - Ireland	• **Explanation:** There is no impact between hand harvesting and Lakes - Ireland. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. • **Control Measures:** None required.
(g)	Lakes - Northern Ireland	• **Explanation:** N/A • **Control Measures:** N/A.
(h)	Transitional water quality	• **Explanation:** Transitional water quality of the following areas are unlikely to be affected, as measures are in place to ensure that pollution does not occur and that environmentally safe navigation methods are employed to prevent impacts on estuarine substratum: Kenmare River Estuary, Blackwater K Estuary, Sneem Estuary, Kenmare River, Kilmakilloge Harbour, Ardgroom Harbour. In combination or cumulative effects are unlikely to occur. This is outlined in the assessment in Appendix 7. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. • **Control Measures:** See Appendix 4.
(i)	Coastal water quality	**Explanation:** As above for Transitional water quality - coastal water quality in Kenmare Bay is unlikely to be affected. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. • **Control Measures:** above for Transitional water quality.
19	Boundary	
(a)	Currently designated continental shelf boundary	**Explanation:** There is no impact between hand harvesting and boundaries. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** None required.
(b)	Exclusive economic zone	**Explanation:** There is no impact between hand harvesting and boundaries. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs.

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		Control Measures: None required.
(c)	UK boundaries	**Explanation:** There is no impact between hand harvesting and boundaries. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** None required.
(d)	Local authority area	**Explanation:** There is no impact between hand harvesting and boundaries. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** None required.
(e)	12NM territorial sea limit	**Explanation:** There is no impact between hand harvesting and boundaries. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** None required.
21	National Marine Planning Framework	**Explanation:** The likelihood of giving rise to impacts on the NMPF is low and there are no risks of in combination effects between sustainable harvesting of *A. nodosum* and the NMPF: ➢ *A. nodosum* harvesting is compatible with the NMPF and the associated documentation, including: main draft document, SEA Screening determination, SEA Environmental Report, Appropriate Assessment Screening Report, Appropriate Assessment Screening Determination, Natura Impact Statement, Baseline Report Public Consultation Process, etc. ➢ *A. nodosum* harvesting is compatible with the three pillars of the NMPF: economic, environmental and societal aspects. ➢ *A. nodosum* harvesting is compatible with the objectives of the seaweed harvesting OMPP. ➢ There are no in combination effects between *A. nodosum* harvesting and the OMPPs related to climate change, carbon capture and storage. Hand harvesting of *A. nodosum* is a sustainable marine activity that takes place in the intertidal zone in highly sheltered areas. *A. nodosum* is a renewable resource. As hand harvesting of *A. nodosum* will be undertaken in a sustainable manner to allow regeneration of the resource, net primary production of carbon will not be significantly affected. In addition, marine macrophytes such as seaweed account for low levels of global net primary production (NPP) of carbon per annum (0.95%) compared to other sources, e.g. the combined category of land sources (e.g. land plants, forestry, crops) and marine phytoplankton together account for 99% of global NPP of carbon per annum. Non-seaweed sources such as marine phytoplankton are the main contributor to carbon sequestration in the ocean, accounting for over 97% of the total photosynthesized carbon in the ocean every year. ➢ *A. nodosum* harvesting has no negative impacts or interactions with other OMPPs or other aspects covered in the NMPF such as those listed. Mitigation measures are in place to ensure that there are no in-combination effects with aspects including but

No.	Activity	Potential for likely significant impacts/effects LSE? (direct or indirect, in combination, cumulative)?
		not limited to existing or planned tourism, aquaculture, fisheries, fish stocks, cultural or heritage assets, infrastructure (see Code of Practice). ➢ As above, *A. nodosum* harvesting is entirely compatible with and in line with marine environment matters listed in the NMPF. There are no negative interactions or impacts. ➢ No other interactions have been identified. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required. Ensure adherence to the Code of Practice to ensure no direct or indirect impacts, cumulative or in-combination effects between hand harvesting and the NMPF (Appendix 4).
21	World ocean base	**Explanation:** *A. nodosum* harvesting will not impact on World ocean base. In combination or cumulative effects are unlikely to occur. This proposal is unlikely to give rise to LSEs. **Control Measures:** Not required.

6. References:

- **Marine Institute (2019).** Report supporting Appropriate Assessment of Aquaculture and Fisheries Risk Assessment in Kenmare River SAC.

- **Marine Institute (2020).** Definition and Classification of Ireland's Seascapes. Minogue, R, Foley, K, Collins, T, Hennessy, R, Doherty, P, Vaughan, E and Black, D.

- **National Marine Planning Framework (Draft; 2019).** https://www.gov.ie/en/publication/a4a9a-national-marine-planning-framework/

- **National Marine Planning Framework (2021).** https://www.gov.ie/en/publication/a4a9a-national-marine-planning-framework/

- **Ireland's Marine Spatial Planning Portal (2022-2025).** https://www.marineplan.ie/