

## D11 Energy, including underwater noise

### Existing Programmes

If you have already reported this programme under one of your other (sub)regions, you can refer to this programme by adding the Programme ID code for the first (sub)region here. And then add the relevant MarineUnits where the programme applies within this Region/Sub region.

Provide a unique identifier for a programme already reported under another Region/Sub region

List all the MarineUnitIDs where the monitoring programme applies within the Region/Sub region

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### Existing Sub Programmes

If you have referenced a monitoring programme then please indicate if the same sub programme(s) are implemented within this region/sub region with 'Y'. If additional sub programme(s) are relevant for this region/sub region then report the SubProgrammeID under reference Sub Programme. If the list of sub programmes are not identical with the

referenced monitoring programme then report all the relevant sub programmes for the monitoring programme within this region/sub region.

#### Reference Sub Programme

Each sub-programme ID for each (sub)region/Member State must be unique.

**Provide a unique identifier for a sub programme.**

**Sub programme name**

#### 4e: Programme ID

Provide a unique identifier for programme. Use sub(region) and MS code (e.g. BALDE) plus MS-defined alpha-numeric code (e.g. MADIT-D08)

**ANSDE\_Mon\_13**

List all the MarineUnitIDs within this (sub)region where the monitoring programme applies

**DE\_ANS,**

#### 4f: Programme description

Describe the overall approaches of the monitoring programme, including: · The rationale for your balance between monitoring of state/impact, pressures, activities and measures? · How it adapts to new and emerging environmental problems (pressures and impacts) in relation to the relevant Descriptor(s). Free text or URL web link or section in paper report

**In Deutschland gibt es für den Deskriptor D 11 noch kein etabliertes Monitoring. Entsprechende Subprogramme befinden sich in der Entwicklung. (siehe Q 5 h)**

#### 5a: Relevant GES criteria

Which GES criteria are addressed by the programme?

Select all relevant from list: GES criteria

- 1.1: Species distribution**
- 1.2: Population size**
- 11.1: Distribution in time and place of loud, low and mid frequency impulsive sounds**
- 11.2: Continuous low frequency sound**

Description of Other (if selected):

#### 5b: Relevant GES characteristics [indicators]

Which GES characteristics (indicators) are addressed by the programme?

Select all relevant from list: GES Indicators

- 1.2.1: Population abundance and/or biomass (frequency) measured by observation stations and/or with the use of models as appropriate**
- 11.2.1: Trends in the ambient noise level within the 1/3 octave bands 63 and 125 Hz (centre**

Description of Other (if selected):

#### 5c: Relevant features, pressures and impacts from MSFD Annex III

##### Habitats

Relevant features, pressures and impacts from MSFD Annex III

Select all relevant habitat elements (from MS Art. 8 report - features present)

Description of Other (if selected):

##### Habitat Specials

Relevant features, pressures and impacts from MSFD Annex III

Select all relevant species elements (from MS Art. 8 report - features present)

Description of Other (if selected):

##### Physical/Chemical Features

Relevant features, pressures and impacts from MSFD Annex III

Select all relevant physical/chemical elements (from MS Art. 8 report - features present)

- Physical/chemical features: Topography/bathymetry**
- Physical/chemical features: Salinity**
- Physical/chemical features: Current velocity**
- Physical/chemical features: Wave exposure**
- Physical/chemical features: pH**

Description of Other (if selected):

#### Pressures

Relevant features, pressures and impacts from MSFD Annex III

Select all relevant pressure elements (from MS Art. 8 report - features present)

- Pressure: Underwater noise**

Description of Other (if selected):

#### 5d: Adequacy: for assessment of GES (Art. 8 & 9) - Adequate data: Yes or No?

Will the programme provide adequate data and information to enable the periodic assessment of environmental status, and distance from and progress towards GES, including whether environmental status is improving, stable or deteriorating? Yes or no? **No**

Established methods for assessment: Yes or no? **No**

Adequate understanding of GES: Yes or no? **No**

Adequate capacity to perform assessments: Yes or no? **No**

#### 5e: Natural variability

How does the programme address natural variability?

- |   |  |
|---|--|
| <input type="checkbox"/> <b>In a quantitative process</b> | <input type="checkbox"/> <b>Expert opinion</b>   |
| <input type="checkbox"/> <b>In a qualitative process</b>  | <input checked="" type="checkbox"/> <b>Other</b> |

Description of Other (if selected):

#### 5f: Description GES - Add to end of current guidance: Free text or URL web link or section in paper report.

Describe how the programme: a. addresses assessment needs for the relevant Descriptor(s) and targets b. meets the needs of providing data/ information to support assessment of the Descriptor (or particular biodiversity component programme for D1, 4, 6) c. contributes to determining distance from GES and trends in status d. addresses natural and climatic variability and distinguish this from the effects of anthropogenic pressures e. responds to risks of not achieving GES

**Die Monitoringprogramme werden die Daten für die Bewertung des Umfangs der Schallbelastung der Küstengewässer unter räumlichen und zeitlichen Aspekten liefern (siehe auch Q 5h).**

#### 5g: Gap-filling date GES

If not yet considered adequate for data and information needs, when will the programme be considered fully adequate? Select one from enumeration list

- By 2014**  **By 2018**  **By 2020**  **After 2020**

#### 5h: Plans GES

If the programme is not yet considered fully adequate, what plans are in place to make it adequate (e.g. to fill gaps in data, methods, understanding or capacity)? Free text or URL web link or section in paper report

**Derzeit erfolgt die Erfassung von Schalldaten auf Projektbasis und im Rahmen der Beweissicherung von Einzelprojekten. Dies ist für mittel- und langfristige Messungen abzusichern, zugleich müssen die Kriterien für die Datenerfassung, Weiterleitung und Speicherung weiterentwickelt und mindestens regional harmonisiert werden. Programme zur Modellierung der Schallbelastung, die erhobene Daten berücksichtigen, sind weiter zu entwickeln. Zur Erfassung der Belastung der Meeresumwelt durch Unterwasserschall sind zwei sich ergänzende Messprogramme vorgesehen. Mit einem Netz von Hydrophonen zur Messung von Unterwasserschall, welches die territorialen Gewässer und die AWZ abdeckt, soll an geeigneten Referenzstandorten (ausreichende Entfernung zu starken Schallemitenten, Abbildung von Akkumulationsgebieten wie Schifffahrtsstraßen, frei von Fischereiaktivitäten) die Schallbelastung für die biologisch relevanten Frequenzbereiche erfasst werden. In einem Schallregister**

**sollen alle relevanten und abgrenzbaren Schallereignisse erfasst werden . Die erhobenen Daten dienen als Referenz für Modellierungen zur Hintergrundschallbelastung, die auf der Basis u.a. von geeigneten Schallausbreitungsmodellen, AIS-Daten und akustischen Schiffssignaturen erstellt werden.**

#### 6a: Relevant targets (from Art. 10)

Which targets are addressed by your programme (Art. 10)?

UZN6

Select relevant associated indicator targets (from the MS report on Art. 10)

UZN6\_IND\_6.1.3

UZN6\_IND\_6.1.4

UZN6\_IND\_6.2.3

Add relevant targets (from the MS report on Art. 10)

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#### 6b: Adequacy: for assessment of progress with targets (Art. 10)

Will the programme provide suitable and sufficient data and information to enable assessment of progress towards achievement of the relevant environmental targets (using indicators identified by MS under Art. 10) Suitable and sufficient data: Yes or no? **Yes**

Established methods for assessment: Yes or no? **No**

Adequate capacity to perform assessments: Yes or no? **No**

#### 6c: Target updating

Suitable and sufficient data: Yes or no?

#### 6d: Description Targets

Explain how the programme will contribute to the assessment of progress with targets. Free text or URL web link or section in paper report

**Die Modellierung der Unterwasserschallbelastung wird über entsprechende Dienste die Darstellung der räumlichen und zeitlichen Belastung der Meeresgebiete durch Unterwasserschall zulassen. Die Auswertung nach Entwicklung der Belastung in der Zeit wird hieraus möglich sein. Das gleiche gilt für die im Schallregister zu erfassenden Daten.**

#### 6e: Gap-filling date targets

If not yet considered adequate for data and information needs, when will the programme be considered fully adequate? Select one from enumeration list

By 2014  By 2018  By 2020  After 2020

#### 6f: Plans Targets - (e.g. to fill gaps in data, methods or capacity)?

If the programme is not yet considered fully adequate, what plans are in place to make it adequate (e.g. to fill gaps in data, methods, understanding or capacity)? Free text or URL web link or section in paper report

**Das Monitoringprogramm kann eine vollständige Einschätzung zur Erreichung der Umweltziele erst dann liefern, wenn die nationalen, operativen Umweltziele entsprechend konkretisiert und quantifiziert und passende Indikatoren entwickelt wurden und anwendbar sind. Im Zusammenhang mit der Erstellung der Maßnahmenprogramme nach Art. 13 MSRL wird eine solche Konkretisierung und Quantifizierung der Umweltziele nach Art. 10 MSRL vorgenommen. Dieser Prozess wird noch bis 2018 andauern. Die Entwicklung eines adequadaten Messnetzes als Grundlage für die Modellierung, die Weiterentwicklung von Modellierungstools und die regionale Abstimmung hinsichtlich Datenerhebung, Transport und Speicherung muss erfolgen.**

#### 7a: Link to relevant activities

Which activities will the programme address?

Energy production: Marine-based renewable energy generation (wind)

Energy production: Marine hydrocarbon (oil and gas) extraction

Extraction of non-living resources: Marine mining (sand and gravel)

Extraction of non-living resources: Dredging

- Man-made structures (incl. construction phase): Submarine cable and pipeline operations**
- Transport: Shipping**

Description of Other (if selected):

#### 7b: Description Activities

Describe the nature of activity and/or pressure monitoring (e.g. addressing spatial distribution, intensity and/or frequency) and how the programme is considered adequate to assess which activities and/or pressures are causing environmental change (degradation) and hence identification of possible measures, if needed. Free text or URL web link or section in paper report

**Das Monitoring soll kontinuierliche und impulshafte Schallereignisse sowie Schockwellen aus verschiedenen Quellen umfassen. Ziel ist eine Zuordnung von Schallereignissen zu Quellen und Initiierung von Massnahmen zur Minimierung von Einträgen.**

#### 7c: Relevant measures

Which existing measures will the programme address?

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#### 7d: Description Measures

Describe the nature of monitoring of measures and how the programme enables their effectiveness (impact) in relation to delivering desired changes in environmental status to be assessed (e.g. what processes are in place to prove corrective measures are having the desired effect, and how is uncertainty quantified)? Free text or URL web link or section in paper report

**Das nationale Maßnahmenprogramm Art. 13 MSRL befindet sich derzeit noch in der Aufstellung. Aussagen, wie das Monitoring eine Effizienzkontrolle der Maßnahmen gewährleistet, können erst nach Festlegung der einzelnen Maßnahmen getroffen werden. Die Fragen 7c bis 7f können somit im ersten Berichtszyklus noch nicht vollständig beantwortet werden. Dies erfolgt im zweiten Berichtszyklus 2018. Durch das Monitoring von Schalleinträgen wird auch die Wirksamkeit von Minderungsmaßnahmen überprüft werden können.**

#### 7e: Adequacy for assessment of measures (Art. 13)) - Adequate data: Yes or No?

Will the programme provide adequate data and information to enable the identification of activities and/or their pressures that are causing environmental degradation (and consequently suitable measures if needed) and the effectiveness of relevant measures?

Yes or no? **Yes**

Established methods for assessment: Yes or no?

Adequate understanding of GES: Yes or no? **Yes**

Adequate capacity to perform assessments: Yes or no? **No**

Addresses activities/pressures: Yes or no? **Yes**

Addresses effectiveness of measures: Yes or no? **No**

#### 7f: Gap Filling Date Activities Measures

If not yet considered adequate for data and information needs, when will the programme be considered fully adequate? Select one from enumeration list

- By 2014**  **By 2018**  **By 2020**  **After 2020**

#### 8a: Links to existing monitoring programmes

Which monitoring programmes under Community legislation or international agreements contribute to and are compatible with your MSFD programme? Note: specific details are captured at sub-programme level – question 4m)

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|---|---|
| <input type="checkbox"/> <b>Bathing Water Directive</b>                             | <input type="checkbox"/> <b>Water Framework Directive</b>         |
| <input type="checkbox"/> <b>Common Fisheries Policy - Data Collection Framework</b> | <input type="checkbox"/> <b>Barcelona Convention UNEP/MAP</b>     |
| <input type="checkbox"/> <b>Habitats Directive</b>                                  | <input type="checkbox"/> <b>Bucharest Convention</b>              |
| <input type="checkbox"/> <b>Birds Directive</b>                                     | <input type="checkbox"/> <b>Helsinki Convention</b>               |
| <input type="checkbox"/> <b>Nitrates Directive</b>                                  | <input type="checkbox"/> <b>OSPAR Convention</b>                  |
| <input type="checkbox"/> <b>Urban Waste Water Treatment Directive</b>               | <input type="checkbox"/> <b>Trilateral Wadden Sea Cooperation</b> |
|   | <input type="checkbox"/> <b>Other (specify)</b>                   |