



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR MARITIME AFFAIRS AND
FISHERIES

International Ocean Governance and Sustainable Fisheries
Regional Management Fisheries Organisations

Memorandum of Understanding on the Conservation of Migratory Sharks

Report from the European Union and its Member States

September 2018

***Contributions from Belgium, Bulgaria, Denmark, Germany, Greece, Italy, Lithuania,
Portugal, Romania, Spain, the United Kingdom and the European Union***

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1. EU NATIONAL REPORT

I. General Information

Year	Country	National Report
2018	EUROPEAN UNION	

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II. Objectives of the Conservation Plan

Objective A:

Improving understanding of migratory shark populations through research, monitoring and information exchange

A 1. Which of these Annex I species are found in your waters?

Drop down menu:

Species listed in Annex 1 of the MOU

- Rhincodontidae: *Rhincodon typus*
- Cetorhinidae: *Cetorhinus maximus*
- Lamnidae:
 - *Carcharodon carcharias*
 - *Isurus oxyrinchus*
 - *Isurus paucus*
 - *Lamna nasus*
- Squalidae: *Squalus acanthias* (Northern Hemisphere populations)
- Pristidae:
 - *Anoxypristis cuspidata*
 - *Pristis clavata*
 - *Pristis pectinata*
 - *Pristis zijsron*
 - *Pristis pristis*
- Mobulidae:
 - *Manta alfredi*
 - *Manta birostris*
 - *Mobula mobular*
 - *Mobula japanica*
 - *Mobula thurstoni*
 - *Mobula tarapacana*
 - *Mobula eregoodootenkee*
 - *Mobula kuhlii*
 - *Mobula hypostoma*
 - *Mobula rochebrunei*
 - *Mobula munkiana*
- Carcharhinidae: *Carcharhinus falciformis*
- Sphyrnidae:
 - *Sphyrna mokarran*
 - *Sphyrna lewini*
- Alopiidae:
 - *Alopias superciliosus*
 - *Alopias vulpinus*
 - *Alopias pelagicus*

A 2. Is your government compiling relevant data for improving understanding of migratory shark populations through research, monitoring and information exchange for species in Annex 1?

Check boxes:

- Yes

Drop down menu:

- Species listed in Annex 1 of the MOU and “migratory sharks in general”

Check boxes:

- Population demographics; (defined as size, dynamics, structure and abundance)
- Critical Seasons
- Critical life stages
- Essential marine habitats
- Distributional range
- Migration corridors
- Behaviour and ecology
- Threats to conservation
- Identifying species that are most vulnerable to human activities and fisheries
- Other

Provide information about research, initiatives, and programmes etc.:

*For *Squalus acanthias* a bycatch avoidance programme is in place since November 2016 for certain UK vessels in ICES Divisions VIIe-j, mapping the occurrence of spurdog in the area. This programme has as its legal basis the TAC/quota regulation 2018/120.*

For certain deep-sea sharks, set out in regulation 2016/2285, a bycatch avoidance programme in the longline fishery for black scabbardfish is in place since 2017. This is also meant to improve data on deep-sea sharks.

The International Council for the Exploration of the Sea (ICES) Working Group on Elasmobranch Fishes (ICES WGEF) is providing assessments and advice on the state of the stocks of sharks, skates, and rays throughout the ICES area.
<http://www.ices.dk/community/groups/Pages/WGEF.aspx>

In addition to the specific arrangements and support to the scientific bodies and expert groups that provide the required scientific advice for the elaboration and implementation of the CFP (ICES, STECF, JRC etc), the European Union supports through voluntary contributions scientific research for sharks and mitigation of by-catch in the RFMOs to which it is Party (e.g. WCPFC, IATTC, ICCAT, IOTC).

The EU also supports through voluntary contributions various activities, including capacity building activities, in cooperation with various partners in relevant bodies (RFMOs, FAO, CITES, CMS, Sharks MoU etc), with the aim to improving compliance and effectiveness of the implementation of conservation and management measures for sharks.

Provide information about monitoring activities:

Under the revised EU Data Collection Framework (DCF)¹, the multi-annual Union programme² provides framework for monitoring programmes, data collection and the management of biological data incl. incidental bycatch of fish species protected under the Union legislation and international agreements, including on sharks of key species. It will help to assess the impact of fishing activities in EU and non-EU waters.

Under the Council Regulation (EC) No 1185/2003 on the removal of fins of sharks on board vessels³, as amended by Regulation (EU) No 605/2013⁴, where vessels flying the flag of a Member State catch, retain on-board, tranship or land sharks, each year the flag Member State has to submit a report to the Commission on its implementation of the Regulation during the previous year. This includes a description of its monitoring and enforcement of the compliance with the Regulation and, in particular, information on: the number of times sharks were landed; the number, date and place of the inspections; the number and nature of cases of non-compliance as well as the penalty applied; and the total landings by species (weight/number) and by port.

On overview of the monitoring and control activities by EU Members State is given in the Commission's report to the Parliament and the Council on the implementation of the of the Regulation No 1185/2003 as amended by Regulation (EU) No 605/2013 [COM/2016/0207 final⁵].

Objective B:

Ensuring that directed and non-directed fisheries for shark are sustainable

B 1. Are species listed in Annex I caught in your nation's waters (as target or incidental catch) and in what quantity?

Check boxes:

➤ Yes

➤ Targeted catch

No targeted fisheries for sharks are allowed in EU waters of the FAO area 27.

➤ Incidental catch

¹ Regulation (EU) 2017/10004

² Commission Implementing Decision (EU) 2016/1251 of 12 July 2016 adopting a multiannual Union programme for the collection, management and use of data in the fisheries and aquaculture sectors for the period 2017-2019

³ <http://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:32003R1185>

⁴ <http://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:32013R0605>

⁵ <http://eur-lex.europa.eu/legal-content/en/ALL/?uri=COM:2016:207:FIN>

All catches of sharks are incidental bycatches, and only within the 2 bycatch avoidance programmes are fishermen allowed to land a certain amount of these bycatches. All other bycatches of sharks are regulated through art. 13 of the TAC/quota regulation, 2018/120, which entails that when accidentally caught, species listed shall not be harmed. Instead specimens shall be promptly released. It is thus prohibited for EU fishing vessels to fish for, to retain on board, to tranship or to land the listed species.

[If target]

- amount caught = “figure” (choose/specify unit)

[If incidental]

- amount caught = “figure” (choose/specify unit)

What is the fate of incidentally caught species?

*An overview of the data on the shark landings by species (weight/number) by EU Members State is given in the Commission's report to the Parliament and the Council on the implementation of the of the Regulation No 1185/2003 as amended by Regulation (EU) No 605/2013 [COM/2016/0207 final]. It is important to note that the shark species harvested by EU operators are mainly blue shark (*Tintorera*, *Prionace glauca*) – with around 89% of the total EU captures – and shortfin mako (*Marrajo*, *Dientuso Isurus oxyrinchus*) – with around 8.5% of the total EU captures, These species are neither listed on any appendix of CITES nor under the prohibited species list under the Fishing Opportunities Regulations.*

The reports of the ICES Working Group on Elasmobranch Fishes are available online. The newest 2017 report can be found here:

<http://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/acom/2017/WGEF/01%20WGEF->

<Report%20of%20the%20Working%20Group%20on%20Elasmobranch%20Fishes.pdf>

Executive summary:

<http://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/acom/2017/WGEF/02%20WGEF%20Report%20-%20Executive%20Summary.pdf>

EU Member States send to the European Commission a catch report for fish with automated storage in EC databases. The legal obligation is in the amended Control Regulation 2015/1962⁶ article 146i. There is a link to <http://fides3.fish.cec.eu.int/>

EUROSTAT on fisheries data:

<http://ec.europa.eu/eurostat/web/fisheries/statistics-illustrated>

The European Market Observatory for fisheries and aquaculture (EUMOFA):

<http://www.eumofa.eu/>

⁶ COMMISSION IMPLEMENTING REGULATION (EU) 2015/1962 of 28 October 2015 amending Implementing Regulation (EU) No 404/2011 laying down detailed rules for the implementation of Council Regulation (EC) No 1224/2009 establishing a Community control system for ensuring compliance with the rules of the common fisheries policy

Drop down:

➤ List of fates

B 2. What management measures (be as specific as possible) are in place for species listed on Annex I of the MOU, and when were they implemented?

Current management measures to protect sharks are contained in a wide range of fisheries and environmental legislation as well as a number of international Conventions and Agreements.

All catches of sharks are incidental bycatches, and only within the 2 bycatch avoidance programmes are fishermen allowed to land a certain amount of these bycatches. All other bycatches of sharks are regulated through art. 13 of the TAC/quota regulation, 2018/120, which entails that when accidentally caught, species listed shall not be harmed. Instead specimens shall be promptly released. It is thus prohibited for EU fishing vessels to fish for, to retain on board, to tranship or to land the listed species.

The EU measures are also in line with the NEAFC measures for deep-sea sharks, spurdog, porbeagle and basking shark respectively.

More broadly, the EU Common Fisheries Policy (CFP)⁷, a comprehensive regulatory framework, aims at ensuring that fishing activities are environmentally sustainable in the long-term. It implements the ecosystem-based approach and applies the precautionary approach to fisheries management in order to ensure that negative impacts of fishing activities on the marine ecosystem are minimised.

More specifically, the EU strategy for the conservation and management of sharks is articulated around the following key areas of action: i) strict protection and conservation of endangered shark species, ii) sustainable management of commercial species (targeted or by catch), iii) improvement of species specific data collection, iv) support to research related to the biology, ecology and management of sharks, v) enforcement of relevant national and international rules, vi) traceability and certification of sustainably harvested shark products.

When it comes to the particular measures at EU level, in 2009 the EU Plan of Action for the Conservation and Management of Sharks⁸ (EUPOA sharks) was adopted [COM/2009/0040 final]. It falls within the scope of the Common Fisheries Policy and aims at broadening the knowledge on shark fisheries, on shark species and their role in the ecosystem, ensuring that directed fisheries for shark are sustainable and that by-catches of shark resulting from other fisheries are properly regulated. This plan identifies the measures deemed necessary both at EU level (TACs, technical measures, effort and capacity limits, data collection) and under international law.

Under the Council Regulation (EC) No 1185/2003 on the removal of fins of sharks on board vessels, as amended by Regulation (EU) No 605/2013, established a general prohibition of the practice of shark finning, i.e. the removal of a shark's fins and the discarding of the remaining carcass at sea.

⁷ REGULATION (EU) No 1380/2013

<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32013R1380>

⁸ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52009DC0040>

Furthermore, specific technical measures have been implemented to protect various shark and ray species. The Mediterranean Regulation includes such measures as: the prohibition to use driftnets, the prohibition to use bottom set nets to catch several groups of sharks, the protection of the coastal zone from trawling, as well as gear requirements such as maximum net dimension and low twine thickness for bottom-set nets that further help to reduce unwanted by-catches of sharks.

The EU financially supports through the European Maritime and Fisheries Fund (EMFF) the scientific community and the fishing industry to develop new and selective fishing gears that help avoid sharks in the first place. More generally, the EMFF offers financial support in order to protect and restore biodiversity and ecosystems. This includes the development of innovative gears to minimise bycatch and of mitigation measures; collection and management of biological data, cooperation between MS in data collection, regionalised databases, at sea monitoring of bycatch of marine organisms; support to control and surveillance, e.g. novel monitoring techniques to particular remote electronic monitoring to record incidental catches of protected species.

B 3. Has your country prohibited the taking of species listed in CMS Appendix I?

Check boxes:

- Yes

Describe protection measures and reasons for any exceptions:

Objective C

Ensuring to the extent practicable the protection of critical habitats and migration corridors and critical life stages of sharks

C 1. Does your country protect habitats of species listed on Annex I of the MOU?



Check boxes:

- Yes
- No

[If yes]

Drop down menu:

- Species listed in Annex 1 of the MOU and “migratory sharks in general”

Describe the measures taken to protect the area, when the area was protected and the size of the area.

Objective D

Increasing public awareness of threats to sharks and their habitats, and enhance public participation in conservation activities

D 1. Is your government taking steps to improve public knowledge on migratory sharks?

Check boxes:

- Yes

Drop down menu:

Regarding...

- Sharks' importance in the ecosystem;
- Threats to sharks;
- Threats to marine and coastal habitats;
- This Memorandum of Understanding;
- International conservation policies regarding sharks; and
- Other

A dedicated webpage on the European Commission's website specifically focused on sharks and its fisheries can be found here:

https://ec.europa.eu/fisheries/marine_species/wild_species/sharks_en

Objective E:

Enhancing national, regional and international cooperation

E 1. Has your country identified areas where cooperation among States is required for successful conservation and management activities?

Check boxes:

- Yes X
- No

*At **international level**, cooperation on conservation issues of sharks in the Mediterranean and Black Sea is under the auspice of the GFCM. The relative legislative acts currently in place are:*

- *Recommendation GFCM/36/2012/3 on fisheries management measures for the conservation of sharks and rays in the GFCM area of application*
- *The UNEP/MAP in 2003 included also an Action Plan for the Conservation of Cartilaginous Fishes (chondrichthyans) in the Mediterranean Sea*
- *At present there is a pending proposal for a 2018 recommendation on fisheries management measures for the conservation of sharks and rays in the GFCM area of application, amending Recommendation GFCM/36/2012/3. This will be discussed*

under the 42nd GFCM Annual Session in Oct 2018.

E 2. Has your country engaged with other States to address these areas?

Check boxes:

- Yes
- No

[If yes]

Describe:

E 3. Has there been any cooperation between your country and other countries on developing institutional capacity and/or competencies in:

Check boxes:

- Yes X
- No

[If yes]

Drop down menu:

- Shark identification
- Management and conservation techniques
- Habitat protection
- Coordination with other stakeholders
- Implementation of this Memorandum of Understanding
- Other

Describe:

The EU has funded two CITES projects that include shark species (<https://cites.org/eng/prog/shark/projects.php>).

The project of 1.2 million euros from 2013 to 2016 „Strengthening capacity in developing countries for sustainable wildlife management and enhanced implementation of CITES wildlife trade regulations, with particular focus on commercially-exploited aquatic species” included several actions and studies on shark fishing and international trade in sharks and shark products. The project was implemented in close consultation and partnership with FAO, RFMOs/RBOs, Parties, and other stakeholders from the fisheries sector, as well as with academia and NGOs (see https://cites.org/sites/default/files/eng/prog/shark/docs/Implem%20shark%20ray%20listings_E.pdf).

The EU contribution of 900,000 EUR was announced in May 2017 for the second phase (2017-2020) of the project that builds on the experiences of the first phase and the

feedback received from the previous years. It will further scale up targeted activities to assist with the implementation of CITES provisions for commercially-exploited marine species, including sharks. The activities will take advantage of strong existing partnerships, and establish new ones, with a view to maximizing synergies, avoiding duplication of work and delivering outcomes in a coordinated and effective manner (see https://cites.org/eng/news/pr/EU-provides-900000-EUR-support-CITES-marine-species-capacity-building-projects_19052017).

Barcelona Convention

The EU and all its Mediterranean Member States are signatory to this Convention. The Programme of Work 2018-2019 adopted by COP20 (<http://web.unep.org/uneppmap/20th-ordinary-meeting-contracting-parties-convention-protection-marine-environment-and-coastal-5>) includes two projects implemented by the Regional Activity Center for Specially Protected Areas which include work on elasmobranchs, as well as the update of the Action Plan for the Conservation of Cartilaginous fishes (Chondrichthyans) based on national and regional review. The deliverables of the projects on elasmobranchs will contribute to the implementation of the Action Plan for the Conservation of Cartilaginous fishes (Chondrichthyans) in the Mediterranean Sea http://www.rac-spa.org/sites/default/files/doc_fish/fishes.pdf .

The first project (2017-2020) “Bycatch project” aims to support UNEP/MAP Barcelona Convention, and specifically the southern and eastern Mediterranean Contracting Parties (Morocco, Tunisia and Turkey), to identify and test measures to reduce impact of fisheries on marine mammals, birds, turtles and elasmobranchs. This project focuses on three separate fishing gears: demersal trawl, gillnets and longlines and it aims at developing and implementing standardized data collection of bycatch across the Mediterranean, in both EU and non-EU countries, and to develop and test mitigation measures regarding their effectiveness in reducing single and multi-taxa bycatch and which can be eventually adopted in the whole region through the development of bycatch strategy (2020-2030) (see http://www.rac-spa.org/bycatch_pr).

The second project “Species Project” (2018-2020) aims to support also UNEP/MAP Barcelona Convention to expand the state of knowledge of vulnerable species (among them elasmobranchs): their distribution, range , migratory routes, habitat use. The project will compile existing data, carry out gap analysis and acquire new data before identifying new important areas for biodiversity for each species or group of species (potential KBAs, IMMAs, IBAs, EBSAs, CCHs etc.) and will further complement the data and analysis being acquired through the bycatch project.

III. Please provide any additional information relevant to the Conservation Plan for species listed on Annex 1, or in general, provide any information about what you know about sharks in your waters.

➤ Describe:

The European Commission's websites specifically focused on sharks and its fisheries can be found here:

https://ec.europa.eu/fisheries/marine_species/wild_species/sharks_en

https://ec.europa.eu/fisheries/marine_species/wild_species/sharks/member-states-reports/

Other than listed above relevant COM official documents:

- *Commission staff working paper Draft (2011) XXX – Impact Assessment accompanying the Proposal for a Regulation of the European Parliament and of*

the Council amending Council Regulation (EC) 1185/2003 on the removal of fins of sharks on board vessels

- *Commission staff working document SEC (2009) 103 – Impact assessment accompanying the communication from the Commission to the European Parliament and the Council on a European Community Plan of Action for the Conservation and Management of Sharks*

Relevant Scientific, Technical and Economic Committee for Fisheries (STECF) reports as found on webpage: <https://stecf.jrc.ec.europa.eu/reports>

In line with specific provisions of Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), certain species of sharks and derived products are under trade controls. Species listed on Appendix I of CITES cannot be subject to trade, while those listed on Appendix II can be traded under certain conditions. CITES provisions are implemented in all EU Member States through Council Regulation (EC) 338/97⁹. To note, the shark species caught and commercialised by the EU fleet are not listed as prohibited species or protected under CITES.

OSPAR Convention webpage <https://www.ospar.org/>

Convention on the Conservation of European Wildlife and Natural Habitats (Bern convention)

IV. Have you identified any gaps or needs in the field of research, capacity-building, training, data collection etc. relevant to the conservation of Annex 1 species?

- Describe:

⁹

http://ec.europa.eu/environment/cites/legislation_en.htm
<http://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:31997R0338>

2. BELGIUM NATIONAL REPORT

I. General Information

Year	Country	National Report
2018	Belgium	

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II. Objectives of the Conservation Plan

Objective A:

Improving understanding of migratory shark populations through research, monitoring and information exchange

A 1. Which of these Annex I species are found in your waters?

Drop down menu:

- Species listed in Annex 1 of the MOU none

A 2. Is your government compiling relevant data for improving understanding of migratory shark populations through research, monitoring and information exchange for species in Annex 1?

Check boxes:

- Yes
- No **No**

[If yes]

Drop down menu:

- Species listed in Annex 1 of the MOU and “migratory sharks in general”

Check boxes:

- Population demographics; (defined as size, dynamics, structure and abundance)
- Critical Seasons
- Critical life stages
- Essential marine habitats
- Distributional range
- Migration corridors
- Behaviour and ecology
- Threats to conservation
- Identifying species that are most vulnerable to human activities and fisheries
- Other

Provide information about research, initiatives, and programmes etc.:

Provide information about monitoring activities:

Objective B:

Ensuring that directed and non-directed fisheries for shark are sustainable

B 1. Are species listed in Annex I caught in your nation's waters (as target or incidental catch) and in what quantity?

Check boxes:

- Yes
- No **No**

[If yes]

Check boxes:

- Targeted catch
- Incidental catch

[If target]

- amount caught = "figure" (choose/specify unit)

[If incidental]

- amount caught = "figure" (choose/specify unit)
- What is the fate of incidentally caught species?

Drop down:

- List of fates

B 2. What management measures (be as specific as possible) are in place for species listed on Annex I of the MOU, and when were they implemented?

B 3. Has your country prohibited the taking of species listed in CMS Appendix I?

Check boxes:

- Yes

- No

Describe protection measures and reasons for any exceptions:

Provide references to policy documents (legislation, management plans etc.)

Regulation (EU) n° 2018/120 article 13

Objective C

Ensuring to the extent practicable the protection of critical habitats and migration corridors and critical life stages of sharks

C 1. Does your country protect habitats of species listed on Annex I of the MOU?

Check boxes:

- Yes
- No **No**

[If yes]

Drop down menu:

- Species listed in Annex 1 of the MOU and “migratory sharks in general”

Describe the measures taken to protect the area, when the area was protected and the size of the area.

Objective D

Increasing public awareness of threats to sharks and their habitats, and enhance public participation in conservation activities

D 1. Is your government taking steps to improve public knowledge on migratory sharks?

Check boxes:

- Yes
- No **No**

[If yes]

Drop down menu:

Regarding...

- Sharks' importance in the ecosystem;
- Threats to sharks;
- Threats to marine and coastal habitats;
- This Memorandum of Understanding;
- International conservation policies regarding sharks; and
- Other

Describe:

**Objective E:
Enhancing national, regional and international cooperation**

E 1. Has your country identified areas where cooperation among States is required for successful conservation and management activities?

Check boxes:

- Yes
- No **No**

[If yes]

Describe:

E 2. Has your country engaged with other States to address these areas?

Check boxes:

- Yes
- No **No**

[If yes]

Describe:

E 3. Has there been any cooperation between your country and other countries on developing institutional capacity and/or competencies in:

Check boxes:

- Yes
- No

[If yes]

Drop down menu:

- Shark identification
- Management and conservation techniques
- Habitat protection
- Coordination with other stakeholders
- Implementation of this Memorandum of Understanding
- Other

Describe:

III. Please provide any additional information relevant to the Conservation Plan for species listed on Annex 1, or in general, provide any information about what you know about sharks in your waters.

Describe:

IV. Have you identified any gaps or needs in the field of research, capacity-building, training, data collection etc. relevant to the conservation of Annex 1 species?

Describe:

3. BULGARIA NATIONAL REPORT

V. General Information

Year	Country	National Report
2018	Bulgaria	

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VI. Objectives of the Conservation Plan

Objective A:

Improving understanding of migratory shark populations through research, monitoring and information exchange

A 1. Which of these Annex I species are found in your waters?

Drop down menu:

- Species listed in Annex 1 of the MOU

Squalus acanthias (GSAs 37)

A 2. Is your government compiling relevant data for improving understanding of migratory shark populations through research, monitoring and information exchange for species in Annex 1?

Check boxes:

- **Yes**

- Pilot project for assessment of discard in *rapana venosa* fisheries with beam trawls in the Black sea during 2017; Evaluation of the impact on juvenile forms of turbot and sharks.
- Scientific survey for assess the quantity caught, discarded, landed and collection of biological data for all species of fish and other marine organisms through observers on board of Bulgarian fishing vessels engaged in fisheries activities in the Black Sea in 2018 and 2019.
- Collecting data for catches.

Drop down menu:

- Species listed in Annex 1 of the MOU and “migratory sharks in general”

Check boxes:

- Population demographics; (defined as size, dynamics, structure and abundance)
- Critical Seasons
- Critical life stages
- Essential marine habitats
- Distributional range
- Migration corridors
- Behaviour and ecology
- Threats to conservation
- Identifying species that are most vulnerable to human activities and fisheries
- Other

Provide information about research, initiatives, and programmes etc.:

- A policy adopted in 2016 for the recording of all catches, including below 50 kg, as well as vessels having by-catches of dogfish.
- Pilot project for assessment of discard in *rapana venosa* fisheries with beam trawls in the Black sea during 2017; Evaluation of the impact on juvenile forms of turbot and sharks - **No incidental catchec of Squalus acanthias**.
- Scientific survey for assess the quantity caught, discarded, landed and collection of biological data for all species of fish and other marine organisms through observers on board of Bulgarian fishing vessels engaged in fisheries activities in the Black Sea in 2018 and 2019.

Objective B:

Ensuring that directed and non-directed fisheries for shark are sustainable

B 1. Are species listed in Annex I caught in your nation's waters (as target or incidental catch) and in what quantity?

- **Yes**

The *Squalus acanthias* fishery is a target catch in Bulgaria

Targeted catch

Quantities:

2015 - 133.04 mt

2016 - 83.49 mt

2017 - 50.50 mt

Incidental catch: **Not reported**

B 2. What management measures (be as specific as possible) are in place for species listed on Annex I of the MOU, and when were they implemented?

Limit of the catches (133.04 mt), based on catches in 2015 (implemented in 2016)

Minimum landing size for *Squalus acanthia* - 90 cm – from 2006

Permitted gears - Long lines

B 3. Has your country prohibited the taking of species listed in CMS Appendix I?

➤ **No**

Objective C

Ensuring to the extent practicable the protection of critical habitats and migration corridors and critical life stages of sharks

C 1. Does your country protect habitats of species listed on Annex I of the MOU?

➤ **No**

Objective D

Increasing public awareness of threats to sharks and their habitats, and enhance public participation in conservation activities

D 1. Is your government taking steps to improve public knowledge on migratory sharks?

➤ **No**

Objective E:

Enhancing national, regional and international cooperation

E 1. Has your country identified areas where cooperation among States is required for successful conservation and management activities?

➤ **No**

E 2. Has your country engaged with other States to address these areas?

➤ **No**

E 3. Has there been any cooperation between your country and other countries on developing institutional capacity and/or competencies in:

Not answered

VII. Please provide any additional information relevant to the Conservation Plan for species listed on Annex 1, or in general, provide any information about what you know about sharks in your waters.

Not answered

VIII. Have you identified any gaps or needs in the field of research, capacity-building, training, data collection etc. relevant to the conservation of Annex 1 species?

Not answered

5. DENMARK NATIONAL REPORT

I. General Information

Year	Country	National Report
2017	Denmark	

Report submitted by:

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Date of Submission	
Contributors (if contributions were submitted by multiple entities)	The Danish Fisheries Agency

II. Objectives of the Conservation Plan

Objective A:

Improving understanding of migratory shark populations through research, monitoring and information exchange

A 1. Which of these Annex I species are found in your waters?

Drop down menu:

- Species listed in Annex 1 of the MOU
- ***Lamna Nasus***
- ***Squalus acanthias***
- ***Alopias vulpinus***

A 2. Is your government compiling relevant data for improving understanding of migratory shark populations through research, monitoring and information exchange for species in Annex 1?

Check boxes:

- Yes
- No **X**

[If yes]

Drop down menu:

- Species listed in Annex 1 of the MOU and “migratory sharks in general”

Check boxes:

- Population demographics; (defined as size, dynamics, structure and abundance)
- Critical Seasons
- Critical life stages
- Essential marine habitats
- Distributional range
- Migration corridors
- Behaviour and ecology
- Threats to conservation
- Identifying species that are most vulnerable to human activities and fisheries
- Other

Provide information about research, initiatives, and programmes etc.:

No special research programmes or initiatives in place

Provide information about monitoring activities:

All species caught in scientific fisheries monitoring schemes are recorded.

Objective B:

Ensuring that directed and non-directed fisheries for shark are sustainable

B 1. Are species listed in Annex I caught in your nation's waters (as target or incidental catch) and in what quantity?

Check boxes:

- Yes

[If yes]

Check boxes:

- Incidental catch

[If target]

- amount caught = "figure" (choose/specify unit)

[If incidental]

- amount caught = "figure" (choose/specify unit) approx. 30 tons landed
- What is the fate of incidentally caught species?

Drop down:

- List of fates
Species released immediately (if caught in EU waters)

Landed if dead or dying caught in Norwegian waters

- B 2. What management measures (be as specific as possible) are in place for species listed on Annex I of the MOU, and when were they implemented?
Species are on the prohibition list in EU regulation
Landing obligation on dead or dying fish in Norwegian waters

- B 3. Has your country prohibited the taking of species listed in CMS Appendix I?

Check boxes:

- Yes

Describe protection measures and reasons for any exceptions:

Provide references to policy documents (legislation, management plans etc.)

- EU regulation prohibits to fish for, to retain on board, to tranship or to land of the two relevant species in Appendix I. (EU TAC/quota regulation). For *Squalus acanthias* in EU waters.

Objective C

Ensuring to the extent practicable the protection of critical habitats and migration corridors and critical life stages of sharks

- C 1. Does your country protect habitats of species listed on Annex I of the MOU?

Check boxes:

- No

[If yes]

Drop down menu:

- Species listed in Annex 1 of the MOU and “migratory sharks in general”

Describe the measures taken to protect the area, when the area was protected and the size of the area.

Objective D

Increasing public awareness of threats to sharks and their habitats, and enhance public participation in conservation activities

D 1. Is your government taking steps to improve public knowledge on migratory sharks?

Check boxes:

- **No**

[If yes]

Drop down menu:

Regarding...

- Sharks’ importance in the ecosystem;
- Threats to sharks;
- Threats to marine and coastal habitats;
- This Memorandum of Understanding;
- International conservation policies regarding sharks; and
- Other

Describe:

**Objective E:
Enhancing national, regional and international cooperation**

E 1. Has your country identified areas where cooperation among States is required for successful conservation and management activities?

Check boxes:

➤ **No**

[If yes]

Describe:

E 2. Has your country engaged with other States to address these areas?

Check boxes:

➤ **No**

[If yes]

Describe:

E 3. Has there been any cooperation between your country and other countries on developing institutional capacity and/or competencies in:

Check boxes:

➤ **No**

[If yes]

Drop down menu:

Describe:

- III. Please provide any additional information relevant to the Conservation Plan for species listed on Annex 1, or in general, provide any information about what you know about sharks in your waters.**

Describe:

- IV. Have you identified any gaps or needs in the field of research, capacity-building, training, data collection etc. relevant to the conservation of Annex 1 species?**

Describe:

6. GERMANY NATIONAL REPORT

I. General Information

Year	Country	National Report
2018	GERMANY	

Report submitted by:

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Date of Submission	27 September 2018
Contributors (if contributions were submitted by multiple entities)	

II. Objectives of the Conservation Plan Objective A: Improving understanding of migratory shark populations through research, monitoring and information exchange

Objective A:

A 1. Which of these Annex I species are found in your waters?

- *Cetorhinus maximus*
- *Lamna nasus*
- *Squalus acanthias* (northern hemisphere population)

A 2. Is your government compiling relevant data for improving understanding of migratory sharks populations through research, monitoring and information exchange for species in Annex 1?

- Yes

Please choose all species for which your government is compiling data from the list below:

- *Cetorhinus maximus*
- *Lamna nasus*
- *Squalus acanthias* (northern hemisphere population)

***Cetorhinus maximus* - please indicate for this species, for which aspects data are compiled and provide details on research, initiatives, programmes and monitoring activities:**

- Distributional range

Provide information about monitoring activities:

Cetorhinus maximus is occasionally recorded in waters of the German North Sea EEZ by aerial seabird and marine mammal surveys.

Objective B: Ensuring that directed and non-directed fisheries for shark are sustainable

B1. Are species listed in Annex I caught in your nation's waters (as target or incidental catch) and in what quantity?

- Yes

***Squalus acanthias* (northern hemisphere population)**

Please indicate for this species, the amount caught as targeted and/or incidental catch, the unit (e.g. kg, tons) and specification (e.g. dry, dressed, frozen):

- Incidental catch

Since 2010 targeted fisheries has been banned in EU waters (EU No. 1194/2010)

For incidentally caught specimens, please provide details on their fate:

There have been no targeted fisheries in EU or Norwegian waters since 2011. Spurdog remains a bycatch in the mixed demersal and gillnet fisheries, and an unquantified amount of discarding now takes place in these fisheries. At-vessel mortality is low in longline fisheries, but higher in trawl and gillnet fisheries. Exact levels of discard survival are variable and unknown, being determined by many factors (e.g. catch method, soak time, quantity caught). In the absence of reliable catch data since 2010, ICES assumes the average landings for 2007–2009 to be a representative level of dead catch for 2010 onwards. (ICES Advice on fishing opportunities, catch, and effort Northeast Atlantic, 2016).

B2. What management measures (please be as specific as possible) are in place for species listed on Annex 1 of the MoU, and when were they implemented?

- Management measures are in place

There have been no targeted fisheries in EU or Norwegian waters since 2011. Spurdog remains a bycatch in the mixed demersal and gillnet fisheries, and an unquantified amount of discarding now takes place in these fisheries

B3. Has your country prohibited the taking of species listed in CMS Appendix I?

- Yes

Please describe protection measures and reasons for any exceptions made and provide references to policy documents (legislation, management plans etc.).

There have been no targeted fisheries in EU or Norwegian waters since 2011. Spurdog remains a bycatch in the mixed demersal and gillnet fisheries, and an unquantified amount of discarding now takes place in these fisheries

Objective C: Ensuring to the extent practicable the protection of critical habitats and migration corridors and critical life stages of sharks

C1. Does your country protect habitats of species listed on Annex 1 of the MoU?

- No

Has your government planned any measures to protect habitats of species listed on Annex 1 of the MoU?

In accordance with Article 4, paragraph 4 of the Habitats Directive, once the sites are entered in the European Commission's Community list, Germany is obliged to draft management plans as soon as possible, and at the latest within six years, to ensure the maintenance or restoration of the favourable conservation status of species and habitats. Additionally Germany is also obliged to establish measures, which need to be taken in order to achieve or maintain a "good environmental status" according to the Marine Strategy Framework Directive (MSFD).

The Federal Republic of Germany is striving to take fisheries management measures in four Natura 2000 sites in the German Exclusive Economic Zone (EEZ) of the North Sea concerning all fishing vessels, including EU vessels with fishing rights in the German EEZ under non-

German flag. Management measures have been proposed according to Article 11 and 18 of the Common Fisheries Policy (CFP) for marine Natura 2000-sites in the German EEZ.

In the German EEZ of the North Sea the following three Natura 2000 sites (area km²) have been designated according to the Habitats Directive by the Federal Republic of Germany to the EU COM in May 2004. The proposed management measures are still under negotiation (September 2018):

Borkum Reefground: 625 km²:

Proposed measure: Year-round exclusion of all mobile bottom-contacting gears. The measure aims to protect the habitat types 1110 'Sandbanks' and 1170 'Reefs' and seafloor areas comprising the biotope type 'Species-rich gravel, coarse sand and shell-gravel areas'

Sylter Outer Reef: 5314 km²

Year-round exclusion of all mobile bottom-contacting gears from a management zone in the central area of the Natura 2000 site Sylt Outer Reef.

Year-round exclusion of any kind of fisheries (No-take) from 25% (northern part) of the area of the Amrum Bank (habitat type 1110) in the Natura 2000 site Sylt Outer Reef. The measure aims to protect the Amrum Bank and the biotope type 'Species-rich gravel, coarse sand and shell-gravel areas' according to the MSFD from any disturbance of any fishing activities

Doggerbank: 1692 km²

Year-round exclusion of all mobile bottom-contacting gears from a management zone in the central area of the Natura 2000 site Doggerbank. Measures for the protection of the habitat type 1110 'Sandbanks' on the Dogger Bank will be subject of a joint proposal of the member states NL, UK and D, which have designated Sites of Community Interest (SCI) (see below).

The conservation objectives and the proposed management measures in Marine Protected Areas in the German EEZ are focused on species and habitats that are listed on Annex I and II of the Habitat Directive and bird species protected according to the Birds Directive. The proposed measures are not primarily focused on the conservation of migratory sharks. According to Zidowitz et al. (2017) the spurdog (*Squalus acanthias*) will benefit from the fisheries management measures (e.g. in the Sylt Outer Reef) as food availability will improve and zones for retreat will be established. The establishment of sufficient zones for retreat might be in the future for the recovery or even the return of extinct chondrichthyan species in German EEZ waters.

Please indicate, which species listed in Annex 1 benefit from the above measures/protected habitat.

- *Squalus acanthias* (northern hemisphere population)

Objective D: Increasing public awareness of threats to sharks and their habitats, and enhance public participation in conservation activities

D1. Is your government taking steps to improve public knowledge on migratory sharks?

- Yes

Please select from the options below, on which aspects your government is raising awareness and provide further details as appropriate in the text boxes:

Publication of a scientific study by the Federal Agency for Nature Conservation (BfN) with financial support of the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU):

Zidowitz, H., Kaschner, C., Magath, V., Thiel, R., Weigmann, S. and Thiel, R. (2017) Gefährdung und Schutz der Haie und Rochen in den deutschen Meeresgebieten der Nord- und Ostsee. BfN-Skripten. 224pp.

Objective E: Enhancing national, regional and international cooperation

E1. Has your country identified areas where cooperation among States is required for successful conservation and management activities?

- Yes

A scientific study by Zidowitz et al. (2017) has been conducted between July 2013 and February 2016 on the collection and evaluation of historical and current data concerning the occurrence of chondrichthyan species in the North and Baltic Seas.

Close ecological connectivity exist between the German and adjacent areas of the Dogger Bank. Therefore, according to Zidowitz et al. (2017) conservation measurements for chondrichthyans in the Natura 2000 site Dogger Bank should be based on a cross-border concept. An international network of protected sites in the North Sea area could also be helpful for re-introductions of extinct and critical-ly endangered species.

E2. Has your country engaged with other States to address these areas?

- Yes

A draft Joint-Recommendation for offshore fisheries Management on the international Dogger Bank as provided for in art. 11 of EU Regulation 1380/2013 (EU, 2013) to regulate fisheries in the Dogger Bank, Site of Community Interest (SCI), for the protection of habitat type 1110 (sandbanks which are slightly covered by sea water all the time) and its typical species has been initiated by the governments of Germany, the Netherlands and the United Kingdom.

To establish a zoning system on the Dogger Bank SCI with management zones and open zones. It is proposed to close all management zones for the following gear types: beam trawl, bottom/otter trawl, dredges and semi-pelagic trawls. The German Management Zone will also be closed for demersal seines. Open zones are open to not otherwise prohibited gear types. The proposed management zones cover approximately one third of the combined SCI Doggerbank.

E3. Has there been any cooperation between your country and other countries on developing institutional capacity and/or competencies?

- Yes

Please select from the options below, the respective areas of cooperation and provide further details as appropriate in the text boxes:

- Habitat protection

III. Please provide any additional information relevant to the Conservation Plan for species listed on Annex 1, or in general, provide any information about what you know about sharks in your waters.

–

**IV. Have you identified any gaps or needs in the field of research, capacitybuilding, training, data collection etc. relevant to the conservation of Annex 1 species?
Please describe:**

According to ZIDOWITZ et al. (2017) filling of still existing gaps in knowledge would support elaboration and successful implementation of measures for the improvement of the conservation status of chondrichthyans in German waters. Future research concerning chondrichthyan species established in German waters should therefore for instance focus on the following points: compilation of further his-torical occurrence data, analysis of parameters of stock structure and reproduction biology, identification of important reproduction and nursery areas, clarification of migration patterns and habitat use, collection of species specific data of catch and bycatch, analysis of the effects of electromagnetic fields, investigation and modelling of the influence of changed cli-matic conditions.

The introduction of special monitoring programmes for chondrichthyans seems to be useful for certain questions, e.g. in case of data collection with regard to the impact of recreational fishing on chondrichthyans.

7. GREECE NATIONAL REPORT

I. General Information

Year	Country	National Report
2018	GREECE	

Report submitted by:

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II. Objectives of the Conservation Plan

Objective A:

Improving understanding of migratory shark populations through research, monitoring and information exchange

A 1. Which of these Annex I species are found in your waters?

Drop down menu:

- Species listed in Annex 1 of the MOU
 - Alopias superciliosus
 - Alopias vulpinus
 - Carcharodon carcharias
 - Cetorhinus maximus
 - Isurus oxyrinchus
 - Lamna nasus
 - Mobula mobular
 - Pristis pectinata
 - Pristis pristis
 - Sphyrna lewini
 - Sphyrna mokarran
 - Squalus acanthias

A 2. Is your government compiling relevant data for improving understanding of migratory shark populations through research, monitoring and information exchange for species in Annex 1?

Check boxes:

- Yes through EUMAP
- No

[If yes]

Drop down menu:

- Species listed in Annex 1 of the MOU and “migratory sharks in general”
 - Alopias superciliosus
 - Alopias vulpinus
 - Carcharodon carcharias
 - Cetorhinus maximus
 - Isurus oxyrinchus
 - Lamna nasus
 - Mobula mobular
 - Pristis pectinata
 - Pristis pristis
 - Sphyrna lewini

Sphyrna mokarran
Squalus acanthias
Other migratory species:
Prionace glauca
Dalatias licha
Heptranchias perlo
Hexanchus griseus

- Species listed in Annex 1 of the MOU
 - Alopias superciliosus
 - Alopias vulpinus
 - Carcharodon carcharias
 - Cetorhinus maximus
 - Isurus oxyrinchus
 - Lamna nasus
 - Mobula mobular
 - Pristis pectinata
 - Pristis pristis
 - Sphyrna lewini

Sphyrna mokarran
Squalus acanthias

Check boxes:

- Population demographics; (defined as size, dynamics, structure and abundance)
- Critical Seasons
- Critical life stages
- Essential marine habitats
- Distributional range
- Migration corridors
- Behaviour and ecology
- Threats to conservation
- Identifying species that are most vulnerable to human activities and fisheries
- Other

Provide information about research, initiatives, and programmes etc.:

Collection of biological data from commercial and recreational fisheries under the EC regulations 2017/1004 and 2016/1251

Collaboration with the Technological Education Institute, Department of Food Technology (Thessaloniki, Greece) regarding DNA barcoding and levels of mislabelling/species substitution in commercialised shark meat that is sold under the term “Galeos”.

Provide information about monitoring activities:

Biological information (length, sex, weight, maturity) are reported through the research survey at sea (MEDITS) whenever specimens are caught/available.

Objective B:

Ensuring that directed and non-directed fisheries for shark are sustainable

B 1. Are species listed in Annex I caught in your nation's waters (as target or incidental catch) and in what quantity?

For the following species there is official ban of their commercial and recreational fishery (Ministerial Decision 4531/83795/20-7-2016)

Carcharodon carcharias

Cetorhinus maximus

Isurus oxyrinchus

Lamna nasus

Mobula mobular

Pristis pectinata

Pristis pristis

Sphyrna lewini

Sphyrna mokarran

The species allowed to be landed are: Alopias superciliosus

Alopias vulpinus Squalus acanthias

Check boxes:

Yes

No

[If yes]

Check boxes:

- Targeted catch
- Incidental catch

[If target]

- amount caught = “figure” (choose/specify unit)

[If incidental]

- amount caught = “figure” (choose/specify unit)

Catches are minimum because the occurrence of such species is rare

- What is the fate of incidentally caught species?

Unknown

Drop down:

- List of fates

- B 2. What management measures (be as specific as possible) are in place for species listed on Annex I of the MOU, and when were they implemented?

For the following species there is official ban of their commercial and recreational fishery (Ministerial Decision 4531/83795/20-7-2016)

Carcharias taurus
Carcharodon carcharias
Cetorhinus maximus
Dipturus batis
Galeorhinus galeus
Gymnura altavela
Isurus oxyrinchus
Lamna nasus
Leucoraja circularis
Leucoraja melitensis
Mobula mobular
Odontaspis ferox
Oxynotus centrina
Pristis pectinata
Pristis pristis
Rhinobatos cemiculus
Rhinobatos rhinobatos
Rostroraja alba
Sphyrna lewini

Sphyrna mokarran
Sphyrna zygaena
Squatina aculeata
Squatina oculata
Squatina squatina

B 3. Has your country prohibited the taking of species listed in CMS Appendix I?

Check boxes:

- Yes
- No

Describe protection measures and reasons for any exceptions:

Provide references to policy documents (legislation, management plans etc.)

There is official ban of their commercial and recreational fishery (Ministerial Decision 4531/83795/20-7-2016). There is no exception to the ban.

Objective C

Ensuring to the extent practicable the protection of critical habitats and migration corridors and critical life stages of sharks

C 1. Does your country protect habitats of species listed on Annex I of the MOU?

Check boxes:

- Yes
- No

[If yes]

Drop down menu:

- Species listed in Annex 1 of the MOU and “migratory sharks in general”

Describe the measures taken to protect the area, when the area was protected and the size of the area.

Objective D

Increasing public awareness of threats to sharks and their habitats, and enhance public participation in conservation activities

D 1. Is your government taking steps to improve public knowledge on migratory sharks?

Check boxes:

- Yes
- No

[If yes]

Drop down menu:

Regarding...

- Sharks' importance in the ecosystem;
- Threats to sharks;
- Threats to marine and coastal habitats;
- This Memorandum of Understanding;
- International conservation policies regarding sharks; and
- Other

Describe:

The Directorate General for Fisheries of the Ministry of Rural Development & Food has published a Guide for the Recognition of sharks and skates, which is freely available to the public from the following link:

<http://www.alieia.minagric.gr/sites/default/files/announcementsFiles/2017%20%CE%9F%CE%94%CE%97%CE%93%CE%9F%CE%A3%20%CE%9A%CE%91%CE%A1%CE%A7%CE%91%CE%A1%CE%99%CE%A9%CE%9D%20%CE%9A%CE%91%CE%99%20%CE%A3%CE%95%CE%9B%CE%91%CE%A7%CE%99%CE%A9%CE%9D.pdf>

This guide includes species of Annex I.

Objective E:

Enhancing national, regional and international cooperation

E 1. Has your country identified areas where cooperation among States is required for successful conservation and management activities?

Check boxes:

- Yes
- No

[If yes]

Describe:

E 2. Has your country engaged with other States to address these areas?

Check boxes:

- Yes
- No

[If yes]

Describe:

E 3. Has there been any cooperation between your country and other countries on developing institutional capacity and/or competencies in:

Check boxes:

- Yes
- No

[If yes]

Drop down menu:

- Shark identification
- Management and conservation techniques
- Habitat protection
- Coordination with other stakeholders
- Implementation of this Memorandum of Understanding

➤ Other

Describe:

III. Please provide any additional information relevant to the Conservation Plan for species listed on Annex 1, or in general, provide any information about what you know about sharks in your waters.

Describe:

Due to lack of biological data and the presence of recent genetic results (Gubili et al., 2014; Gubili et al., 2016, Kousteni et al., 2015), it has been shown that elasmobranchs found in Greek waters form a separate genetic stock.

IV. Have you identified any gaps or needs in the field of research, capacity-building, training, data collection etc. relevant to the conservation of Annex 1 species?

Describe:

Funding for genetic research to identify population structure in the Mediterranean Sea. Additionally, there is an imperative need for correct taxonomic identification for certain genera (i.e. Squalus, Verissimo et al., 2017).

8. ITALY NATIONAL REPORT

I. General Information

Year	Country	National Report
2018	ITALY	

Report submitted by:

Name	.
Title	..
Institution	MIPAAF
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Email	.
Telephone / Fax	..
Website	.
Date of Submission	
Contributors (if contributions were submitted by multiple entities)	

II. Objectives of the Conservation Plan

Objective A:

Improving understanding of migratory shark populations through research, monitoring and information exchange

A 1. Which of these Annex I species are found in your waters?

Drop down menu:

- Species listed in Annex 1 of the MOU

<u>Lamnidae</u>	<u>Carcharodon carcharias</u>	<u>Yes</u>
	<u>Isurus oxyrinchus</u>	<u>Yes</u>
	<u>Isurus paucus</u>	<u>No</u>
	<u>Lamna nasus</u>	<u>Yes</u>
<u>Cetorhinidae</u>	<u>Cetorhinus maximus</u>	<u>Yes</u>
<u>Squalidae</u>	<u>Squalus acanthias</u>	<u>Yes (not migratory species)</u>

A 2. Is your government compiling relevant data for improving understanding of migratory shark populations through research, monitoring and information exchange for species in Annex 1?

Check boxes:

<u>Lamnidae</u>	<u>Carcharodon carcharias</u>	<u>MEDLEM</u>
	<u>Isurus oxyrinchus</u>	<u>MEDLEM</u>
	<u>Isurus paucus</u>	<u>MEDLEM - Just a record</u>
	<u>Lamna nasus</u>	<u>MEDLEM</u>
<u>Cetorhinidae</u>	<u>Cetorhinus maximus</u>	<u>MEDLEM</u>
<u>Squalidae</u>	<u>Squalus acanthias</u>	<u>DCF - MEDITS</u>

- Yes

[If yes]

Drop down menu:

- Species listed in Annex 1 of the MOU and “migratory sharks in general”

Check boxes:

<u>Lamnidae</u>	<u>Carcharodon carcharias</u>	<u>4,9</u>
	<u>Isurus oxyrinchus</u>	<u>9</u>
	<u>Isurus paucus</u>	
	<u>Lamna nasus</u>	<u>9</u>
<u>Cetorhinidae</u>	<u>Cetorhinus maximus</u>	<u>2,5,8,9</u>
<u>Squalidae</u>	<u>Squalus acanthias</u>	<u>1,8,9</u>

- 1Population demographics; (defined as size, dynamics, structure and abundance)
- 2Critical Seasons
- 3Critical life stages
- 4Essential marine habitats
- 5Distributional range
- 6Migration corridors

- 7 Behaviour and ecology
- 8 Threats to conservation
- 9 Identifying species that are most vulnerable to human activities and fisheries
- Other

Provide information about research, initiatives, and programmes etc.:

Thanks to the national (GRUND 1985-2002) and international EU programme MEDITS (DCF) from 1994, many information about the Mediterranean cartilaginous species have been collected. Recently (2017), at CNR_Mazara del Vallo a WORKSHOP ON THE CHONDRICHTHYANS FISHED IN THE SCIENTIFIC CAMPAIGNS has been performed. The target of this WS was the taxonomic problems and the preliminary stock assessments of the specie collected during the scientific campaigns. The same species considered also in the ELASMOSTAT programme sponsored by MiPAAF in 2014. So, the main research carried out in the CNR-Mazara Institute are the following:

-Study of the taxonomic aspects

-Stock assessment of the main chondrichthyans species

-Evaluation on the age (vertebrae, LFD, tagging, etc.)

-Evaluation on the maturity stages in collaboration with UNICA

-DNA of the Mediterranean elasmobranchs in collaboration with UNIBO coordinator of the international BARCODING programme

-Evaluation of the conservation status of the Med. Elasmobranchs. Indeed, at CNR-Mazara work as associated researcher the Co-Regional Vice Chair IUCN Shark Specialist Group for Mediterranean.

-the CNR-Mazara is involved also in other evaluation programmes, regarding always to the elasmobranchs, like ORIZON, ERANETMED, SAFESHARK of the

Provide information about monitoring activities:

The main monitoring activity is the MEDLEM (MEDiterranean Large Elasmobranchs Monitoring). This programme involve many Mediterranean research Institutions belonging to 20 different countries. The management of the program MEDLEM is made at the CNR of Mazara del Vallo. in any case, his documentation was filed at the GFCM in Rome. Other important activities are carrying out by Padova, Palermo and Bologna Universities in collaboration with CNR-Mazara on the Mustelus, Centrophorus and Squalus genus. Again, at CNR-Mazara a specific monitoring activity is targeted to egg-cases for the rays and sharks

Objective B:

Ensuring that directed and non-directed fisheries for shark are sustainable

B 1. Are species listed in Annex I caught in your nation's waters (as target or incidental catch) and in what quantity?

Check boxes:

- Yes

[If yes]

Check boxes:

-
- Incidental catch
 - amount caught = "figure" (choose/specify unit)
 - What is the fate of incidentally caught species?

With the exception of spiny dogfish and mako, the others spp are **not** sold

Drop down:

- Sold
- They are taken to dump (discharge)

- B 2. What management measures (be as specific as possible) are in place for species listed on Annex I of the MOU, and when were they implemented?

With the exception of the *Isurus* genus the EU Regulation 2017/127 art.12 prohibits the fishery of the other species in all seas of the Union. The amendment 2017/597 has excluded the spiny dog fish (*Squalus acanthias*) from the Reg 2017/127

- B 3.

Has your country prohibited the taking of species listed in CMS Appendix I?

Check boxes:

- Yes

Describe protection measures and reasons for any exceptions:

Provide references to policy documents (legislation, management plans etc.)

The application of the Reg 2017/127 and its amendment. Moreover we must to take into account also the Law n. 154/2016, containing amendments to the Legislative Decree of 9 January 2012 regarding to measures for the rearrangement of legislation on fisheries and aquaculture, art. 28 of the Law of 4 June 2010 no. 96. See the handbook "Measures to protect the fish resource" published by the Maritime Fishing Department General Command of the Corps of the CP, as a control tool.

Objective C

Ensuring to the extent practicable the protection of critical habitats and migration corridors and critical life stages of sharks

- C 1. Does your country protect habitats of species listed on Annex I of the MOU?

Check boxes:

- No

[If yes]

Drop down menu:

- Species listed in Annex 1 of the MOU and “migratory sharks in general”

Describe the measures taken to protect the area, when the area was protected and the size of the area.

Objective D

Increasing public awareness of threats to sharks and their habitats, and enhance public participation in conservation activities

D 1. Is your government taking steps to improve public knowledge on migratory sharks?

Check boxes:

- Yes

[If yes]

Drop down menu:

Regarding...

- 1Sharks’ importance in the ecosystem;
- 2Threats to sharks;
- 3Threats to marine and coastal habitats;
- 4This Memorandum of Understanding;
- 5International conservation policies regarding sharks; and
- Other

2-The Ministries of Environmental and Sea (MiATTM) and of Fishery (MiPAAF) have produced just a draft for the National Action Plan.

3-Development of Marine Protected Areas and Sites of Community Interest

4-Complete adoption of this MoU

5-Adoption of the European Action Plan to sharks and rays

Describe:

Objective E:

Enhancing national, regional and international cooperation

- E 1. Has your country identified areas where cooperation among States is required for successful conservation and management activities?

Check boxes:

➤ Yes

[If yes]

Describe:

The main area identified is Pelagos Sanctuary among Italy, France and Principality of Monaco

- E 2. Has your country engaged with other States to address these areas?

Check boxes:

➤ Yes

[If yes]

Describe:

Pelagos Sanctuary

- E 3. Has there been any cooperation between your country and other countries on developing institutional capacity and/or competencies in:

Check boxes:

➤ Yes

[If yes]

Drop down menu:

- 1 Shark identification
- 2 Management and conservation techniques
- 3 Habitat protection
- 4 Coordination with other stakeholders
- 5 Implementation of this Memorandum of Understanding
- Other

Describe:

1,2- Activities developed inside the MEDITS coordination

- III. Please provide any additional information relevant to the Conservation Plan for species listed on Annex 1, or in general, provide any information about what you know about sharks in your waters.**

Describe:

Italy has a draft of the National Action Plan for the conservation of sharks and rays but from many years this draft cannot get to main goal requested by FAO IPOA-

- IV. Have you identified any gaps or needs in the field of research, capacity-building, training, data collection etc. relevant to the conservation of Annex 1 species?**

Describe:

The main difficulties are related to the possibility of sharing data collected during scientific campaigns, for example the MEDITS dataset. The MiPAAF should guarantee the possibility of using of these row data

9. LITHUANIA NATIONAL REPORT

I. General Information

Year	Country	National Report
2018	Lithuania	

Report submitted by:

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Date of Submission	2018-07-03
Contributors (if contributions were submitted by multiple entities)	

II. Objectives of the Conservation Plan

Objective A:

Improving understanding of migratory shark populations through research, monitoring and information exchange

A 1. Which of these Annex I species are found in your waters?

None of listed species in Annex I

A 2. Is your government compiling relevant data for improving understanding of migratory shark populations through research, monitoring and information exchange for species in Annex 1?

Check boxes:

- Yes
- No

[If yes]

Drop down menu:

- Species listed in Annex 1 of the MOU and “migratory sharks in general”

Check boxes:

- Population demographics; (defined as size, dynamics, structure and abundance)
- Critical Seasons
- Critical life stages
- Essential marine habitats
- Distributional range
- Migration corridors
- Behaviour and ecology
- Threats to conservation
- Identifying species that are most vulnerable to human activities and fisheries
- Other

Provide information about research, initiatives, and programmes etc.:

Provide information about monitoring activities:

Objective B:

Ensuring that directed and non-directed fisheries for shark are sustainable

B 1. Are species listed in Annex I caught in your nation’s waters (as target or incidental catch) and in what quantity?

Check boxes:

- Yes

- No

[If yes]

Check boxes:

- Targeted catch
- Incidental catch

[If target]

- amount caught = "figure" (choose/specify unit)

[If incidental]

- amount caught = "figure" (choose/specify unit)
- What is the fate of incidentally caught species?

Drop down:

- List of fates

B 2. What management measures (be as specific as possible) are in place for species listed on Annex I of the MOU, and when were they implemented?

No management measures are in place.

B 3. Has your country prohibited the taking of species listed in CMS Appendix I?

Check boxes:

- Yes
- No

Describe protection measures and reasons for any exceptions:

Provide references to policy documents (legislation, management plans etc.)

No specific legal acts are in place

Objective C

Ensuring to the extent practicable the protection of critical habitats and migration corridors and critical life stages of sharks

C 1. Does your country protect habitats of species listed on Annex I of the MOU?

Check boxes:

- Yes
- No

[If yes]

Drop down menu:

- Species listed in Annex 1 of the MOU and “migratory sharks in general”

Describe the measures taken to protect the area, when the area was protected and the size of the area.

Ministry of Environment is in charge on this issue.

Objective D

Increasing public awareness of threats to sharks and their habitats, and enhance public participation in conservation activities

D 1. Is your government taking steps to improve public knowledge on migratory sharks?

Check boxes:

- Yes
- No

[If yes]

Drop down menu:

Regarding...

- Sharks' importance in the ecosystem;
- Threats to sharks;
- Threats to marine and coastal habitats;
- This Memorandum of Understanding;
- International conservation policies regarding sharks; and
- Other

Describe:

Ministry of Environment is in charge on this issue.

Objective E:

Enhancing national, regional and international cooperation

E 1. Has your country identified areas where cooperation among States is required for successful conservation and management activities?

Check boxes:

- Yes
- No

[If yes]

Describe:

E 2. Has your country engaged with other States to address these areas?

Check boxes:

- Yes
- No

[If yes]

Describe:

E 3. Has there been any cooperation between your country and other countries on developing institutional capacity and/or competencies in:

Check boxes:

- Yes
- No

[If yes]

Drop down menu:

- Shark identification
- Management and conservation techniques
- Habitat protection
- Coordination with other stakeholders
- Implementation of this Memorandum of Understanding
- Other

Describe:

III. Please provide any additional information relevant to the Conservation Plan for species listed on Annex 1, or in general, provide any information about what you know about sharks in your waters.

Describe:

IV. Have you identified any gaps or needs in the field of research, capacity-building, training, data collection etc. relevant to the conservation of Annex 1 species?

Describe:

10. PORTUGAL NATIONAL REPORT

I. General Information

Year	Country
2018	Portugal

Report submitted by:

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Date of Submission	31 October 2018

II. Objectives of the Conservation Plan

Objective A:

Improving understanding of migratory shark populations through research, monitoring and information exchange

A 1. Which of these Annex I species are found in your waters?

Alopias superciliosus
Alopias vulpinus
Carcharhinus falciformis
Carcharodon carcharias
Cetorhinus maximus
Isurus oxyrinchus
Isurus paucus
Lamna nasus
Manta birostris
Mobula mobular
Mobula tarapacana
Rhincodon typus
Squalus acanthias

A 2. Is your government compiling relevant data for improving understanding of migratory shark populations through research, monitoring and information exchange for species in Annex 1?

No

Objective B:

Ensuring that directed and non-directed fisheries for shark are sustainable

B 1. Are species listed in Annex I caught in your nation's waters (as target or incidental catch) and in what quantity?

No

No targeted fisheries for sharks are allowed in Portuguese waters

Targeted catch

Incidental catch X

Captures in national waters

Famíly	Scientific Name	FAO code	Captures/ton
Lamnidae	<i>Isurus oxyrinchus</i>	SMA	117,14
Squalidae	<i>Squalus acanthias</i>	DGS	1,45

What is the fate of incidentally caught species?

Authorized species in by-catch, are unloaded and sold.

If a prohibited species are captured incidentally, it will be returned to the sea and recorded.

- B 2. What management measures (be as specific as possible) are in place for species listed on Annex I of the MOU, and when were they implemented?

- B 3. Has your country prohibited the taking of species listed in CMS Appendix I?

Yes

Describe protection measures and reasons for any exceptions:

See Column 4, Tables I and II

PT implement RFMO's manage and conservation measures that are listed below:

Table I

RFMO (with PT active fleet)	Management measures	Species (Annex 1 to the MOU)	Prohibit: fishing, retaining onboard, transshipping, landing, storing, selling whole carcass or parts	Promptly release: when brought alive on board/when unintentionally encircled in the purse seine net
ICCAT	2017/08	<i>Isurus oxyrinchus</i>		X
	2016/13	Sharks in generaly		
	2016/12	Sharks in generaly		
	2015/06	<i>Lamna nasus</i>		X
	2014/06	<i>Isurus oxyrinchus</i>		
	2013/10	Sharks in generaly		
	2012/05	Sharks in generaly		
	2011/10	Sharks in generaly		
	2011/08	<i>Charcharhinus falcimormis</i>	X	
	2010/08	Sphyrnidae	X	
	2010/07	<i>Carcharhinus longimanus*</i>	X	
	2010/06	<i>Isurus oxyrinchus</i>		
	2009/07	<i>Alopiidae/A. superciliosus</i>	X	
	2007/06	Sharks in generaly		
		18/02	<i>Prionace gluaca*</i>	
17/05		Sharks in generaly		

IOTC	13/06	Sharks in generally		
	13/05	<i>Rhincodon typus</i>		X
	12/09	Alopiidae	X	
IATTC	C-16-06	<i>Charcharhinus falcimormis</i>	X	
	C-16-05	Sharks in generally		
	C-16-04/C-05-03	Sharks in generally		
	C-15-04	Mobulidae	X	
	C-11-11	<i>Charcharhinus longimanus*</i>	X	
WCPFC	CMM 2012-04	<i>Rhincodon typus</i>		X
	CMM 2013-08	<i>Charcharhinus falcimormis</i>	X	
	CMM 2011-04	<i>Charcharhinus longimanus*</i>	X	
	CMM2010-07	Sharks in generally		
GFCM	36/2012/3	Sharks in generally		
NAFO	Article 12/2018 NAFO Measures	Sharks in generally		
NEAFC	10-2017	Deep sea sharks*	X	
	07-2016	<i>Lamna nasus</i>		X
	08-2016	<i>Cetorhinus maximus</i>		
	10-2015	Sharks in generally		

* Species not listed in the Annex I, but under conservation/manage measures.

EU Reg. 2018/120, 23rd January of 2018 PROHIBITS in all EU waters fishing, retaining onboard, transshipping and landing the below shark species:

Table II

listed in the Annex I of the MOU		not listed in the Annex I of the MOU
<i>Charcharodon carcharias</i>	IN ALL WATERS	<i>Centrophorus squamosus</i> (EU waters: CIEM 2a and CIEM 4;International waters: CIEM 1 and 14)
<i>Cetorhinus maximus</i>		<i>Centroscymnus coelolepis</i> (EU waters: CIEM 2a and CIEM 4;International waters: CIEM 1 and 14)
<i>Lamna nasus</i>		<i>Dalatias licha</i> (EU waters: CIEM 2a and CIEM 4;International waters: CIEM 1 and 14)
<i>Mobula mobular</i>		<i>Squatina squatina</i> (in all EU waters)
<i>Mobula rochebrunei</i>		
<i>Mobula japanica</i>		
<i>Mobula thrustoni</i>		
<i>Mobula eregoodootenkee</i>		
<i>Mobula munkiana</i>		
<i>Mobula tarapacana</i>		
<i>Mobula kuhlii</i>		
<i>Mobula hypostoma</i>		
<i>Squalus acanthias</i>	In subzones CIEM 2, 3, 4, 5, 6, 7, 8, 9 and 10 – highlight the PT waters	

Remarks: article 19th, 25th, 31st,38th, are related to the species already listed in the previous RFMO table.

Objective C

Ensuring to the extent practicable the protection of critical habitats and migration corridors and critical life stages of sharks

C 1. Does your country protect habitats of species listed on Annex I of the MOU?

No answer

Objective D

Increasing public awareness of threats to sharks and their habitats, and enhance public participation in conservation activities

D 1. Is your government taking steps to improve public knowledge on migratory sharks?

Check boxes:

Yes

Regarding...

Sharks' importance in the ecosystem; X

Threats to sharks; X

Threats to marine and coastal habitats; X

Describe:

http://www.cienciaviva.pt/img/upload/5_tubaroes.pdf

<https://www.publico.pt/2017/12/07/ciencia/noticia/tres-proyectos-sobre-tubaroes-e-raias-vao-partilhar-fundo-de-100-mil-euros-1795221>

Objective E:

Enhancing national, regional and international cooperation

E 1. Has your country identified areas where cooperation among States is required for successful conservation and management activities?

No answer

E 2. Has your country engaged with other States to address these areas?

No answer

E 3. Has there been any cooperation between your country and other countries on developing institutional capacity and/or competencies in:

Yes

Portugal is actively engaged in the work pursued by relevant RFMOs related with conservation, management, control and inspection of fishing activities of all regulated resources. Within the EU, the international representation of MS in fisheries is performed by the European Commission. In fact, the EU is one of the most active contracting parties of these RFMOs. From the scientific perspective, it is worth to note the role of Portuguese scientists, namely within ICCAT and IOTC, acting as chairs of innumerable working groups that specifically address the issue of sharks.

All recommendations and resolutions adopted by RFMOs have a legally binding character, and the EU legislation, in terms of shark conservation, goes beyond the actual list of prohibited species adopted by relevant RFMOs, demonstrating its compromise and engagement if the conservation of vulnerable species.

Therefore, no specific measures are requested under national legislation, as most of the legal framework is provided by the EU or international legislation.

Moreover, the EU fleet is obliged to comply with a much more restrict rule system, when comparing with other third country fishing fleets. One example is the framework applied to the fins, and fin attached policy that is in force in the EU.

No

III. Please provide any additional information relevant to the Conservation Plan for species listed on Annex 1, or in general, provide any information about what you know about sharks in your waters.

Describe:

68

IV. Have you identified any gaps or needs in the field of research, capacity-building, training, data collection etc. relevant to the conservation of Annex 1 species?

Describe:

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11. ROMANIA NATIONAL REPORT

I. General Information

Period	Country	National Report
2016-2018	ROMANIA	

Report submitted by:

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Date of Submission	12 October 2018

Romania is a Signatory state of the Memorandum of Understanding on the Conservation of Migratory Sharks since 2011 recognizing the importance of this instrument to improve the protection and management of migratory sharks.

II. Objectives of the Conservation Plan

Objective A:

Improving understanding of migratory shark populations through research, monitoring and information exchange

A 1. Which of these Annex I species are found in your waters?

- The spiny dogfish - *Squalus acanthias* is listed in Annex 1 of the Sharks MoU.

A 2. Is your government compiling relevant data for improving understanding of migratory shark populations through research, monitoring and information exchange for species in Annex 1?

- Yes

The ministries related to biodiversity in Romania are: Ministry of Environment, Ministry of Waters and Forests, Ministry of Agriculture and Rural Development, Ministry of Education, Ministry of Administration and Internal Affairs, Ministry of Transports, Ministry of Economy and Ministry of Energy.

The specialized institutes linked with biodiversity are the following:

The National Institute for Marine Research and Development "Grigore Antipa"

- ❖ The National Institute for Research and Development of Marine Geology and Geoecology GeoEcoMar
- ❖ The "Danube Delta" National Institute for Research and Development
- ❖ The National Institute for Environmental Protection
- ❖ The National Institute of Statistics

The governmental agencies/authorities related to biodiversity are the following:

- ❖ National Environmental Protection Agency
- ❖ National Agency for Natural Protected Areas
- ❖ National Environmental Guard
- ❖ Environmental Protection Agency Constanța
- ❖ Environmental Protection Agency Tulcea
- ❖ National Company "Maritime Ports Administration" Constanța
- ❖ National Agency for Fishery and Aquaculture
- ❖ Romanian Naval Authority
- ❖ Romania National Water Administration
- ❖ Nuclear Agency for Radioactive Waste
- ❖ Danube Delta Biosphere Reserve Authority
- ❖ Romanian Space Agency

The Romanian Black Sea spans a coast length of 245 km with a shelf area of 30,000 km² and an Economic Exclusive Zone (EEZ) of 30,000 km².

The scientific studies have been done by the National Institute for Marine Research and Development (NIMRD) "Grigore Antipa" – Constanța, which carried out on the fish stocks assessment and conservation measures.

The Administration of the Danube Delta Biosphere Reserve manages the living resources in the Danube Delta Biosphere Reserve area.

The Ministry of Environment draws-up specific legal acts regarding environment protection and the Ministry of Waters and Forests is responsible for the national legislation about the water and forests, authorization procedures for all activities, including fisheries enterprises.

The overall responsibility for fisheries policy in Romania falls under auspices of the National Agency for Fisheries and Aquaculture (NAFA), integrally financed from the state budget, subordinated to the Ministry of Agriculture and Rural Development. NAFA draw-up the strategy and legal framework for fisheries, carry out the implementation of technical measures and the control of regulations in fisheries and aquaculture.

Romania is committed to managing sustainable fisheries in line with the Common Fisheries Policy which provides the framework for sustainable management of commercial fish species, including cartilaginous fishes within European Union waters and is directly involved in international fora aiming the improvement of conservation and management of the cartilaginous fishes: the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention), Convention on International Trade in Endangered Species (CITES) and the Memorandum of Understanding on the Conservation of Migratory Sharks.

Romania supported the listing of shark species on CMS Annexes which compliment fishery management efforts within the Regional Fisheries Management Organizations.

The Romanian Black Sea is highly vulnerable to the anthropogenic impact and to the effects of the global climate change.

The Romanian fishing area is comprised between Sulina and Vama-veche; the coastline extends for over 240 km and can be divided in two main geographical and geomorphologic sectors:

- the northern sector, about 158 km in length, lies between the secondary delta of the Chilia branch and Constanța, constituted of alluvial sediments under the influence of the Danube plume, without direct industrial influence (represented by the Danube Delta marine zone);
- the southern sector, about 85 km in length, lies between Constanța and Vama-veche, characterised by promontories with active, high cliffs, separated by large zones with accumulative beaches often protecting littoral lakes under the influence of diffuse sources from human activities, especially around the main harbours (Midia, Constanța and Mangalia).

The distance from the sea shore to the shelf limits (200 m depth) varies from 100 to 200 km in the north sector and to 50 km in south. The shallow waters up to 20 m depth of the northern part are included in the Biosphere Reserve of Danube Delta. The marine zone of the "Danube Delta" Biosphere Reserve constitutes a traditional zone for spawning and feeding for transboundary species as well as a passage route for anadromous species (sturgeons).

In the Black Sea there is only one species of migratory shark, the spiny dogfish – *Squalus acanthias* Linnaeus, 1758, *Family Squalidae*, Order Squaliformes, considered vulnerable, in accordance with the IUCN Red List.

The researches have been demonstrated that the spiny dogfish has two periods to approaching of shore: April - June and October – November, at a depth ranged between 20-50 m, depending by water's temperature.

During the winter and spring time, the spiny dogfish (*Squalus acanthias*) is inhabiting the marine areas at depths between 65-120 m.

This species is long-lived, late maturing, with low fecundity, which means that the stock has a very limited capability to rebound quickly once it becomes depleted.

Reproductive migrations of viviparous spiny dogfish (*Squalus acanthias*) take place towards the coastal shallows with two peaks of intensity, in spring and autumn.

The autumn migration for reproduction usually covers more individuals.

The state of spiny dogfish stock has been influenced by:

- ❖ intensive fishing due to the big number of trawlers which increased the number of spiny dogfish bycatch;
- ❖ eutrophication following by ecological changes in the Black Sea;
- ❖ *the ctenophore comb jelly (Mnemiopsis leidyi) which is a predator of edible zooplankton, pelagic fish eggs, larvae, associated with fishery crashes. The comb jelly was accidentally introduced via the ballast water of ships to the Black Sea, where it had a catastrophic effect on the entire ecosystem.* The decreasing of the small pelagic fishes stocks and the eutrophication processes have a strong impact on the predators, including the spiny dogfish (*Squalus acanthias*).

The spiny dogfish (*Squalus acanthias*) has the ability to accumulate toxic pollutants – heavy metals and chlorine organic compounds with a negative impact on the reproductive capacity of females.

Objective B:

Ensuring that directed and non-directed fisheries for shark are sustainable

B 1. Are species listed in Annex I caught in your nation's waters (as target or incidental catch) and in what quantity?

➤ Yes

No shark fishery was conducted in the Romanian Black Sea. However, bycatch of dogfish (*Squalus acanthias*) is a common problem for all the fishing gear/methods used by fishermen.

The opportunity of a recovery Plan of the spiny dogfish was analyzed, taking into account the 2020 target: "Halting the loss of biodiversity and the degradation of ecosystem services in the European Union by 2020 and restoring them in so far as feasible".

B 2. What management measures (be as specific as possible) are in place for species listed on Annex I of the MOU, and when were they implemented?

The National Biodiversity Strategy and the Action Plan (NBSAP) were updated in 2018 taking into consideration the decisions of the Convention on Biological Diversity (CBD), the European Union policies, the national priorities and for reflecting the new challenges in biodiversity's conservation (principles of sustainable development, ecosystem-based, marine spatial planning, recognition of habitats connectivity, creation of Marine Protected Areas network etc.).

The E.U. Laws

The **regulations** became binding automatically throughout the EU member state on the date they entered into force.

- Council Regulation (EU) 2016/72 fixing for 2016 the fishing opportunities for certain fish stocks and groups of fish stocks, applicable in Union waters and, for Union fishing vessels, in certain non-Union waters and amending Regulation (EU) 2015/104;
- Regulation (EU) No. 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy, amending Council Regulations (EC) No. 1954/2003 and (EC) No. 1224/2009 and repealing Council Regulations (EC) No. 2371/2002 and (EC) No. 639/2004 and Council Decision 2004/585/EC;
- Regulation (EU) No. 605/2013 of the European Parliament and of the Council of 12 June 2013 amending Council Regulation (EC) No. 1185/2003 on the removal of fins of sharks on board vessels;
- Council Regulation (EC) No. 199/2008 concerning the establishment of a Community framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy.

The E.U. Directives were transposed into the national legislation.

- The Water Framework Directive 2000/60/EC
- Directive 2008/56/EC of the European Parliament and of the Council establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)
- Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora

The national legislation

Specific national legislation in response to European Union harmonization requirements includes the following:

- Law No. 58/1994 ratifying the Convention on Biological Diversity (Rio de Janeiro Convention);
- Law No. 13/1998 ratifying the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention);
- Law No. 5/1991 ratifying the Convention on wetlands of international importance especially as waterfowl habitats (Ramsar Convention);
- Law No. 13/1993 ratifying the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention);
- Law No. 82/1993 on setting up the Danube Delta Biosphere Reserve with amendments;
- Environmental Protection Law No. 137/1995, republished amended by Government Emergency Ordinance No. 91/2002 approval by Law No. 294/2003 with

- amendments;
- Law No. 5/2000 on the territorial planning use - section III protected areas with amendments;
 - ❖ Law No. 218/2011 for the ratification of the Protocol for the biodiversity conservation and natural landscape of the Black Sea (Bucharest Convention);
 - ❖ Law No. 192/2001 (amended by Government Emergency Ordinance No. 23/2008) on live aquatic resources, fishing and aquaculture, regulating the conservation, management and exploitation of live aquatic resources, as well as the processing and trading of fishing and aquaculture products;
 - ❖ Order of the minister of environment and sustainable development No. 1964/2007 regarding the natural protected area regime of the sites of Community importance, as part of the European ecological network Nature 2000 in Romania, amended by the Order of the minister of environment No. 2387/2011;
 - ❖ Order of the minister of agriculture No. 342/2008 on minimal size of the aquatic living resources;
 - ❖ Order of the minister of agriculture No. 449/2008 on technical characteristics and practice conditions for fishing gears used in the commercial fishing;
 - ❖ Order of the minister of agriculture No. 179/2001 regarding the registering and transmission of the data related to the marine fishing activity;
 - ❖ Order of the minister of agriculture No. 422/2001 for the approval of the Regulation on the conditions for the development of the commercial fishing activities in the Black Sea waters;
 - ❖ Government Emergency Ordinance No. 23/2008 on Fishing Fund, Fishery and Aquaculture approved by Law No. 317/2009;
 - ❖ Government Emergency Ordinance No. 195/2005, modified and completed with the Government Emergency Ordinance No. 164/2008 with amendments
 - ❖ Government Decision No. 230/2003 on the delimitation of the biosphere reserves, national parks and natural parks and the setting up of their administrations;
 - ❖ Government Decision No. 2151/2004 on setting up the protected natural area regime for new zones;
 - ❖ Government Decision No. 1586/2006 regarding the including of some protected areas into the category of wetlands of international importance;
 - ❖ Government Decision No. 1679/2008 regarding the procedure of framework Directive for the marine environment Strategy (2008/56/CE);
 - ❖ Law No. 91/2000 on the ratification of the International Agreement of the Conservation of Cetacean in The Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS);
 - ❖ Law No. 23/2008 on fishing fund, fishery and aquaculture;
 - ❖ Order of the minister of environment No. 552/2003 on approval of the internal zoning of natural and national parks from biological diversity conservation point of view;
 - ❖ Order of the minister of environment No. 19/2010 for the approval of Methodology for Appropriate Assessment of potential effects of plans and projects on the community interest natural protected areas;
 - ❖ Order of the minister of environment No. 135/2010 for the approval of Methodology of application of Environmental Impact Assessment (EIA) for the public and private projects;
 - ❖ Order of the ministers of environment and agriculture No. 154/204/2016, No. 12/144/2017, No. 8/174/2018 on the fishing prohibition.

The establishment of Marine Protected Areas network under Nature 2000 contributes not only to halting the loss of biodiversity in the European Union but also to the broader marine conservation and the sustainable use of biodiversity.

The Romanian Marine Protected Areas network consists of 9 sites and has a total area of 1,162.86 km², which amounts to 4.65% of the EEZ and 3.88% of the Romanian shelf zone.

The Management Plans of 9 Natura 2000 sites with conservation and management measures, which correspond to the ecological requirements of Marine Protected Areas, were elaborated and approved by the Minister of Environment.

The marine part of the Danube Delta Biosphere Reserve represents 88.57 % of the whole network's area.

In October 2016, an individual of spiny dogfish (*Squalus acanthias*) founded injured on the Romanian shore of the Black Sea was saved by ecologists.

<https://www.youtube.com/watch?v=3vXbOI4XuKs>

The specific management measures for spiny dogfish (*Squalus acanthias*)

- ✓ Caughting only as bycatch, mainly by gillnets using mesh sizes of 100 mm
- ✓ Using selective gear, devices and techniques; minimum landing size 120 cm (TL)
- ✓ Fishing is prohibited during the period 15 March - 30 April
- ✓ Catching spawning females is prohibited throughout the year

B 3. Has your country prohibited the taking of species listed in CMS Appendix I?

In the Black Sea there are not shark species listed in the CMS Appendix I.

Objective C

Ensuring to the extent practicable the protection of critical habitats and migration corridors and critical life stages of sharks

C 1. Does your country protect habitats of species listed on Annex I of the MOU?

➤ Yes

Romania is Party of international conventions and agreements in relation with the protection of biodiversity:

- Convention on the Law of the Sea
- Convention on the Protection of the Black Sea Against Pollution
- Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention)

- Convention on the Transboundary Effect of Industrial Accidents
- Convention on the Territorial Sea and the Contiguous Zone
- Convention on the Continental Shelf
- Convention on the High Seas
- Convention concerning fishing in the Black Sea
- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal
- Convention for the Prevention of Pollution from Ships
- Agreement concerning cooperation in the North-West Atlantic Fisheries
- Kyoto Protocol UN Framework Convention on Climate Change
- Aarhus Convention

The Black Sea Biodiversity and Landscape Conservation Protocol to the Convention on the Protection of the Black Sea against Pollution purpose is to maintain the Black Sea ecosystem in a good ecological state and its landscape in favourable conditions as well as to preserve and to sustainably manage the biological and landscape diversity in order to enrich the biological resources

The Commission on the Protection of the Black Sea against Pollution (Black Sea Commission) is responsible for the implementation of the Bucharest Convention, its protocols and the Black Sea Strategic Action Plan.

Its goal is to rehabilitate the Black Sea, to preserve it as a valuable natural endowment of the region, while ensuring the sustainable use of its marine and coastal resources for the economic development, well-being, health and security of the population of the Black Sea coastal states.

Over a coastline of 245 km, Romania has 9 Sites of Community Importance, as follows Figure 2:

- ROSCI0311 Viteaz Canyon (newly established)
- ROSCI0413 Southern Lobe of Zernov's *Phyllophora* Field (newly established)
- ROSCI0281 Cape Aurora
- ROSCI0066 Danube Delta - marine zone
- ROSCI0094 Mangalia Sulphide Seeps
- ROSCI0197 Eforie North - Eforie South Submerged Beach
- ROSCI0269 Vama Veche - 2 Mai;
- ROSCI0273 Marine Area of Cape Tuzla
- ROSCI0293 Costinești - 23 August

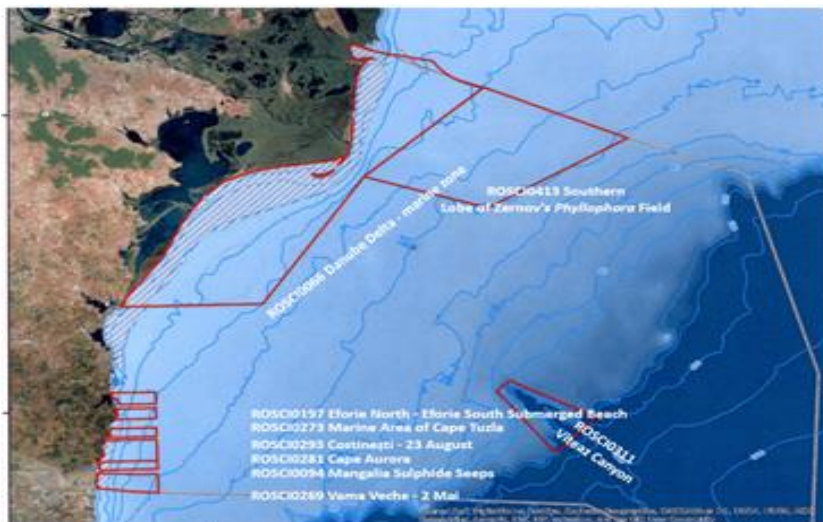


Figure 2 - The network of Marine Protected Areas

Objective D

Increasing public awareness of threats to sharks and their habitats, and enhance public participation in conservation activities

D 1. Is your government taking steps to improve public knowledge on migratory sharks?

➤ Yes

Romania has made steps to establish a comprehensive Clearing House Mechanism (CHM) in the areas related to biodiversity conservation and marine protected areas.

The Red List updated in 2008 for the Romanian sea shore is made up of 206 endangered species of macroalgae, invertebrates, fish and marine mammals.

Special attention is paid to the spiny dogfish (*Squalus acanthias*), to the sturgeons (endangered owing to the conditions in the rivers of origin, to the conditions in the breeding habitats – the benthic area of the Black Sea and to the over fishing) and to the 3 species of dolphins: *Tursiops truncatus ponticus*, *Delphinus delphis ponticus* and *Phocoena phocoena relicta*.

Education and public awareness activities regarding the threats to marine biodiversity and habitats, for promotion the Marine Protected Areas were realized in schools, colleges by the local Environment Protection Agencies Constanța and Tulcea.

Conferences and workshops have been organized by the National Institute for Marine Research and Development "Grigore Antipa", the National Institute for Research and Development of Marine Geology and Geoecology GeoEcoMar, the "Danube Delta"

National Institute for Research and Development, NGOs for improving the public knowledge on migratory species.

Stock assessments and scientific partnerships have been promoted for monitoring, conservation and management activities in the Black Sea.

Objective E:

Enhancing national, regional and international cooperation

E 1. Has your country identified areas where cooperation among States is required for successful conservation and management activities?

➤ Yes

Natura 2000 network is a key instrument for biodiversity loss halting and ecosystems protection. The success of Natura 2000 network depends on the implementation of measures recommended through Black Sea regional legal/policy documents, following the short, medium and long term activities assumed by the international conventions and agreements.

A BlackSea4Fish project was developed under the General Fisheries Commission for the Mediterranean (GFCM), for ensuring the coordination at the Black Sea level, taking into account the priorities related to the midterm strategy.

A brainstorming meeting on the GFCM BlackSea4Fish project, including a session on scientific surveys at sea was held in 2016, in Burgas, Bulgaria.

A few components were proposed: data collection and analysis on Black Sea fisheries and ecosystems; stock assessment; joint surveys; regional cooperation, institutional strengthening, staff training and dissemination of results.

The NIMRD has been working closely with relevant stakeholders (local, central, regional authorities, Fishermen Associations, research institutes and civil society) concerning better identification of bycaught individuals and data collection.

The project “*Co-development of Climate services for adaptation to changing Marine Ecosystems*” has been implementing with 11 partners from 7 countries (France, Germany, Ireland, Norway, Spain, Sweden and Romania) during the period September 2017-August 2020. The CoCliME project has been developing and producing a set of regionally focused climate services, to address key impact areas including human health, aquaculture, fisheries and tourism across the regional seas of Europe.

The developed services and associated decision support tools, empower and support vulnerable coastal sectors, to accelerate adaptive decision-making and feed into key governance mechanisms such as the Marine Strategy Framework Directive, Marine Spatial Planning and local, national and European adaptation planning.

The project team brings together a newly established consortium of boundary organization experts in co-development of climate services with leaders in marine ecosystem research, regional ocean climate modelers and a number of targeted users and decision makers in each region.

The project offers an innovative and user-focused approach and the development of a societally relevant climate service framework, in addition to the bespoke climate services, that will be transferable to other regions, impact areas, users and marine ecosystem vulnerabilities.

E 2. Has your country engaged with other States to address these areas?

➤ Yes

Regional cooperation and consultation mechanisms were established between the riparian countries to the Black Sea for improving knowledge on species biology, ecology and behaviour, distribution areas, migration routes, landings etc.

Scientific and technical exchanges information during the regional workshops, conferences were conducted among the National Institute for Marine Research and Development "Grigore Antipa" and other institutes (Institute of Oceanology – Bulgaria, Fisheries Research Institute – Greece, Fisheries Research Institute – Slovenia, Institute of Oceanography – Spain, Marine Institute – Ireland, Directorate General for Maritime Affairs and Fisheries/Unit A-2: Fisheries Conservation, Mediterranean, Black Sea, Environmental Issues - Belgium) and universities (University of Cagliari, University of Genoa – Italy, University of Split – Croatia, Mustafa Kemal University – Turkey, Stanford University – USA, Tishreen University – Syria etc).

E 3. Has there been any cooperation between your country and other countries on developing institutional capacity and/or competencies in:

➤ Yes

There was an international cooperation through the Advisory Group on Fisheries and other marine living resources/Black Sea Commission, with the General Commission for Fisheries for the Mediterranean (GFCM).

The GFCM Secretariat has been decided strengthening the cooperation in the Black Sea region and established an Working Group on the Black Sea fisheries issues.

Regional coordination meetings have involved the representatives of the National Agencies for Fisheries and Aquaculture from the EU member states, the research institutes, the General Directorate for Maritime Affaires and Fisheries, the European Commission, the Scientific and Technical Committee for Fisheries, the Regional Fisheries Management Organizations and the Food and Agriculture Organization (FAO).

Vama Veche - 2 May Marine Reserve has a high biodiversity, being settled on the migration routes of the main pelagic and benthic fish and marine mammals. It has a great potential to develop transboundary collaboration and cooperation related to Marine Protected Areas, implementing the conservation techniques and coordination with other stakeholders.

III. Please provide any additional information relevant to the Conservation Plan for species listed on Annex 1, or in general, provide any information about what you know about sharks in your waters.

Spiny dogfish (*Squalus acanthias*) inhabits the Black Sea, at 6–15°C, more than 20 m depth and undertakes extensive migrations.

Two peaks of intense spawning are in the spring and autumn time (Fig. 3).

During the autumn migration the spiny dogfish (*Squalus acanthias*) distribution is oriented through the concentrations of anchovy and horse mackerel in the vicinity of the Crimean, Caucasus and Anatolian coasts.

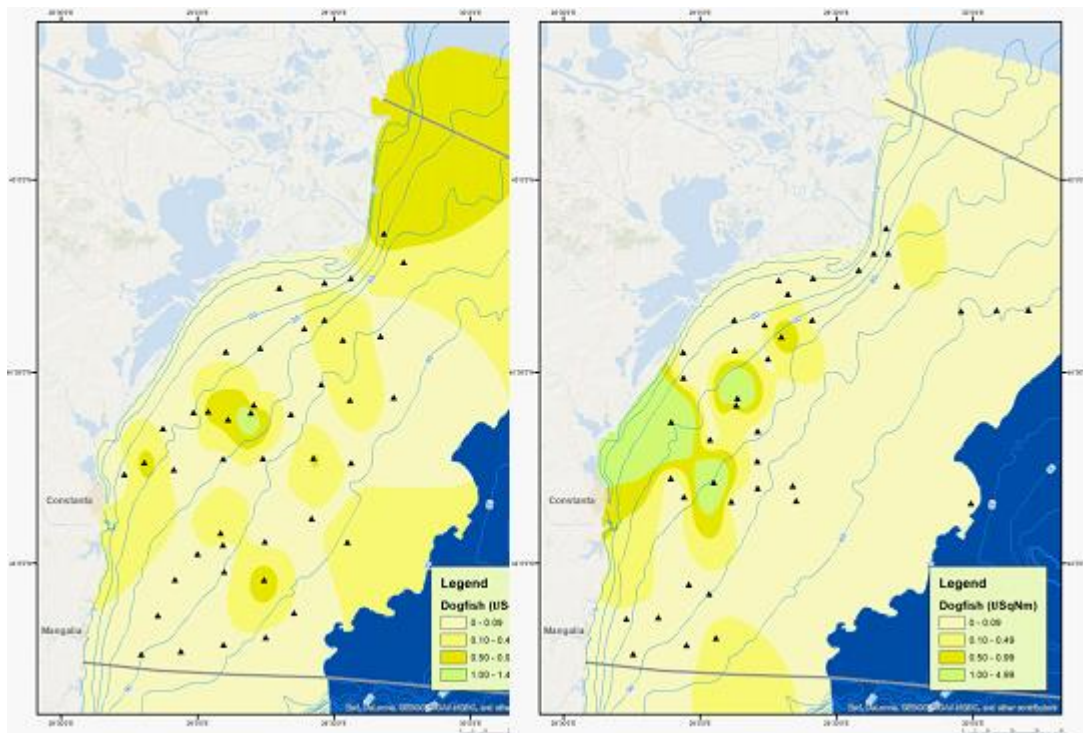


Fig. 3 Distribution of the spiny dogfish (*Squalus acanthias*) in the Black Sea, in 2017, during the spring and autumn period

Natural mortality

For calculation of the natural mortality (M) has been utilized Poly's M equation:
 $\log(M) = -0.0066 - 0.279\log(L_{\infty}) + 0.6543\log(k) + 0.4634\log(T)$

where:

L_{∞}) = asymptotic length measured in total length

K = VBGF growth constant

T = the mean annual habitat

The natural mortality of spiny dogfish (*Squalus acanthias*) in the Romanian Black Sea during the period 2014-2016 is presented in Table 1.

The natural mortality of spiny dogfish (*Squalus acanthias*) in the Romanian Black Sea during the period 2014 – 2016

Table 1

Parameters	2014	2015	2016
M	0.228	0.271	0.319

11.1.1.

(M) = Natural mortality

IV. Have you identified any gaps or needs in the field of research, capacity-building, training, data collection etc. relevant to the conservation of Annex 1 species?

- ❖ lack of financial resources for implementing the Management Plans of Marine Protected Areas;
- ❖ review the national legislation;
- ❖ restoration the spiny dogfish population (*Squalus acanthias*) involving relevant stakeholders from the riparian countries (Romania, Bulgaria, Republic of Moldova, Georgia, Ukraine, Turkey and Russian Federation);
- ❖ capacity building: training and professional development;
- ❖ poor integration of biodiversity conservation into the other policies sectors;
- ❖ strengthening the administrative capacity;
- ❖ ensure coordination between the local and national authorities/institutions and the regional legal framework for a sustainable management of Black Sea and its living resources;
- ❖ harmonization the Black Sea environmental policies with the relevant regional and global initiatives and agreements, in order to achieve synergy in the actions aimed at the further recovery of the Black Sea environment.

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12. SPAIN NATIONAL REPORT

I. General Information

Year	Country	National Report
2017	Spain	

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II. Objectives of the Conservation Plan

Objective A:

Improving understanding of migratory shark populations through research, monitoring and information exchange

A 1. Which of these Annex I species are found in your waters?

Drop down menu:

- Species listed in Annex 1 of the MOU:
Sharks included in Annex I of the MOU in Spanish waters, per marine subdivisions, according to Spanish Inventory of Marine Habitats and Species (IEHEM) are the followings:

Species	Protected by Spanish law	Ap.I. CMS	Ap.II. CMS	D_NOR	D_SUD	D_ESAL	D_LEBA	D_CAN
Alopias superciliosus	LESPRE		2014	P	P	P	P	P
Carcharhinus falciformis	No		2014	R	NO	NO	NO	P
Carcharodon carcharias	LESPRE	2002	2002	P	P	P	P	P
Cetorhinus maximus	LESPRE	2005	2005	P	P	P	P	P
Isurus oxyrinchus	LESPRE		2008	P	P	P	P	P
Isurus paucus	No		2008	P	P	P	NO	P
Lamna nasus	LESPRE		2008	P		P	P	NO
Manta alfredi	No	2014	2014	NO	NO	NO	NO	P
Manta birostris	No	2011	2011	NO	NO	NO	NO	P
Mobula mobular	LESPRE	2014	2014	P	P	P	P	P
Mobula tarapacana	No	2014	2014	NO	NO	NO	NO	P
Pristis pectinata	LESPRE	2014	2014	NO	R	R	NO	R
Pristis pristis	LESPRE	2014	2014	NO	R	P	NO	R
Rhincodon typus	No	2017	1999	NO	NO	NO	NO	P
Sphyrna mokarran	LESPRE		2014	NO	P	P	P	R
Squalus acanthias	No		2008	P	R	P	P	NO

Table 1: LESPRES for species protected under Spanish Royal Decree 139/2011; D_NOR for North-Atlantic subdivision, D_SUD for South Atlantic subdivision, D_ESAL for Straigh and Alborán subdivision, D_LEBA for Levantine-Balearic subdivision, D_CAN for Canary subdivision, P for present species and R for regularly known species, which need further research

A 2. Is your government compiling relevant data for improving understanding of migratory shark populations through research, monitoring and information exchange for species in Annex 1?

Check boxes:

- **Yes**
- **No**

[The Spanish institute of oceanography is involved in the research, monitoring and information exchange for shark's species through its attendance and collaboration in the ICCAT's Standing Committee on Research and Statistics, the RFMO's scientific committees, the General Fisheries Commission for the Mediterranean (GFCM), the UICN Species Survival Commission and FAO.]

Drop down menu:

- Species listed in Annex 1 of the MOU and "migratory sharks in general"
See table 1.

Check boxes:

- **Population demographics; (defined as size, dynamics, structure and abundance)**
- **Critical Seasons**
- **Critical life stages**
- **Essential marine habitats**
- **Distributional range**
- **Migration corridors**
- **Behaviour and ecology**
- **Threats to conservation**
- **Identifying species that are most vulnerable to human activities and fisheries**
- **Other**

Provide information about research, initiatives, and programmes etc.:

Observer programs aimed to collect accurate data on shark catches by species providing the best available information and an appropriate coverage on the high seas as well as programs to collect and assemble the necessary biological and trade data on shark species, including discards. Management measures for sustainable fisheries (for example reducing bycatch), specific measures for shark protection related to conservation and fisheries.

Provide information about monitoring activities:

The management measures for sustainable fisheries are based on adequate monitoring (monitoring of shark catches) based on an appropriate feedback from the industry, trade and conservation initiatives monitoring.

Objective B:

Ensuring that directed and non-directed fisheries for shark are sustainable

- B 1. Are species listed in Annex I caught in your nation's waters (as target or incidental catch) and in what quantity?

Check boxes:

- **Yes**
- **No**

[There are catches of BSK, RPC and RPZ in 2017]

Check boxes:

- Targeted species
- **Incidental catch**

[Of the following species: BSK, RPC, RPZ, RBX]

- amount caught in 2017 =
 - 30Kg of RPC
 - 39 Kg of RPZ
 - 106,6 Kg of BSK
 - 29.362,5 Kg of RBX (International waters)
- What is the fate of incidentally caught species?

Drop down:

- List of fates
 - The 30 Kg of RPC were landed in Isla Cristina port (Spain).
 - The 106.6 Kg of BSK were landed in Mahón port (Spain).
 - The 29.362 Kg of RBX were landed in Conakry and Dakar ports.
 - The 39 Kg of RPZ were released at sea.

B 2. What management measures (be as specific as possible) are in place for species listed on Annex I of the MOU, and when were they implemented?

Prohibition of taking species listed in CMS Appendix I, as described in B.3.

B 3. Has your country prohibited the taking of species listed in CMS Appendix I?

Check boxes:

- **Yes**
- **No**

Describe protection measures and reasons for any exceptions:
There are references to policy documents (legislation, management plans etc.)

Orden ARM/2689/2009, de 28 de septiembre, por la que se prohíbe la captura de tiburones zorro (familia *Alopiidae*) y tiburones martillo o cornudas (familia

Sphyrnidae).

Silky shark is not banned but regulated by the following Spanish rules:

- Orden APM/1057/2017, de 30 de octubre, por la que se modifica la Orden AAA/658/2014, de 22 de abril, por la que se regula la pesca con arte de palangre de superficie para la captura de especies altamente migratorias, y por la que se deroga la Orden ARM/1647/2009, de 15 de junio, por la que se regula la pesca de especies altamente migratorias.
- Resolución de 12 de febrero de 2016, de la Secretaría General de Pesca, por la que se publica la actualización del censo unificado de palangre de superficie
- Orden AAA/658/2014, de 22 de abril, por la que se regula la pesca con el arte de palangre de superficie para la captura de especies altamente migratorias.

Objective C

Ensuring to the extent practicable the protection of critical habitats and migration corridors and critical life stages of sharks

C 1. Does your country protect habitats of species listed on Annex I of the MOU?

Check boxes:

- **Yes**
- No

[Spain declared several Marine Protected Areas, especially those listed under Natura 2000 criteria. Currently Spain has 12% of their waters under protection, mainly declared under the Natura 2000 umbrella. The geographic scope of those MPA includes both, pelagic y benthic domain. Therefore, habitats of species listed in Annex I are included.]

Drop down menu:

- Species listed in Annex 1 of the MOU and “migratory sharks in general”

Describe the measures taken to protect the area, when the area was protected and the size of the area.

There has been a wide variety of measures. Most of the SACs have a management plan which describes the most relevant measures for biodiversity protection. Protection measures focus on habitat and species included in Annex I and II of the Habitat Directive. Additionally, other conservation measures have been drafted in order to protect other sensitive and important species, mainly species included in Annex IV of the HD.

Nevertheless, other species (such as species of Annex I of the MOU) and habitats may benefit from the conservation measures addressed to targeted habitats and species, especially those focus fisheries management measures intending to minimize

interaction with biodiversity.

Objective D

Increasing public awareness of threats to sharks and their habitats, and enhance public participation in conservation activities

D 1. Is your government taking steps to improve public knowledge on migratory sharks?

Check boxes:

- **Yes**
- No

[Yes in the framework of Conservation, Fishing and International Trade.
<http://www.mapama.gob.es/es/biodiversidad/temas/conservacion-de-especies-amenazadas/vertebrados/tiburones.aspx>]

Drop down menu:

Regarding...

- Sharks' importance in the ecosystem;
- Threats to sharks;
- Threats to marine and coastal habitats;
- This Memorandum of Understanding;
- International conservation policies regarding sharks; and
- Other

Describe:

Objective E:

Enhancing national, regional and international cooperation

E 1. Has your country identified areas where cooperation among States is required for successful conservation and management activities?

Check boxes:

- Yes
- No

[If yes]

Describe:

E 2. Has your country engaged with other States to address these areas?

Check boxes:

- Yes
- No

[If yes]

Describe:

E 3. Has there been any cooperation between your country and other countries on developing institutional capacity and/or competencies in:

Check boxes:

- **Yes**
- No

[In the framework of RFMOs and Regional Sea Conventions]

Drop down menu:

- Shark identification
- Management and conservation techniques
- Habitat protection
- Coordination with other stakeholders
- Implementation of this Memorandum of Understanding
- Other

Describe:

III. Please provide any additional information relevant to the Conservation Plan for species listed on Annex 1, or in general, provide any information about

what you know about sharks in your waters.

Describe:

IV. Have you identified any gaps or needs in the field of research, capacity-building, training, data collection etc. relevant to the conservation of Annex 1 species?

Describe:

13. UNITED KINGDOM NATIONAL REPORT

I. General Information

Year	Country	National Report
2018	UK	

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II. Objectives of the Conservation Plan

Objective A:

Improving understanding of migratory shark populations through research, monitoring and information exchange

A 1. Which of these Annex I species are found in your waters?

Drop down menu:

- Species listed in Annex 1 of the MOU
Species listed in Annex 1 of the MOU
- Rhincodontidae: *Rhincodon typus*
- Cetorhinidae: *Cetorhinus maximus* ✓
- Lamnidae:
 - *Carcharodon carcharias*
 - *Isurus oxyrinchus*
 - *Isurus paucus*
 - *Lamna nasus*
- Squalidae: *Squalus acanthias* (Northern Hemisphere populations)
- Pristidae:
 - *Anoxypristis cuspidata*
 - *Pristis clavata*
 - *Pristis pectinata*
 - *Pristis zijsron*
 - *Pristis pristis*
- Mobulidae:
 - *Manta alfredi*
 - *Manta birostris*
 - *Mobula mobular*
 - *Mobula japanica*
 - *Mobula thurstoni*
 - *Mobula tarapacana*
 - *Mobula eregoodootenkee*
 - *Mobula kuhlii*
 - *Mobula hypostoma*
 - *Mobula rochebrunei*
 - *Mobula munkiana*
- Carcharhinidae: *Carcharhinus falciformis*
- Sphyrnidae:
 - *Sphyrna mokarran*
 - *Sphyrna lewini*
- Alopiidae:
 - *Alopias superciliosus*
 - *Alopias vulpinus* ✓
 - *Alopias pelagicus*

A 2. Is your government compiling relevant data for improving understanding of migratory shark populations through research, monitoring and information exchange for species in Annex 1?

Check boxes:

- Yes ✓
- No

[If yes]

Drop down menu:

- Species listed in Annex 1 of the MOU and “migratory sharks in general”

Check boxes:

- Population demographics; (defined as size, dynamics, structure and abundance)
- Critical Seasons
- Critical life stages
- Essential marine habitats
- Distributional range
- Migration corridors
- Behaviour and ecology
- Threats to conservation
- Identifying species that are most vulnerable to human activities and fisheries
- Other

Provide information about research, initiatives, and programmes etc.:

UK Shark, Skate and Ray Conservation Plan

The UK Shark, Skate and Ray Conservation Plan¹⁰ is an important document developed in response to both the FAO and EU Shark Plans of Action. The UK Conservation Plan outlines how the UK will work nationally, within the EU, and internationally to manage and protect elasmobranch species. The plan recognises the important role of elasmobranchs in the ecosystem and highlights the pressures facing them. It summarises the management and conservation measures in place at the time of its publication (January 2011) and sets out UK policy objectives with the overarching aim of managing elasmobranch stocks sustainably so that depleted stocks recover and that those faring better can be sustainably fished. The UK Conservation Plan was reviewed in 2013¹¹ and is expected to be updated during 2019.

The UK has initiated and engaged in a number of research projects focused on elasmobranchs within our waters. In particular, we have been funding work with Centre for Environment, Fisheries and Aquaculture Science (Cefas) to address gaps in our understanding of the ecology, life history and population status of selected elasmobranch species and to improve our understanding of their survivability following discarding in fisheries. Further information on these projects is included below.

¹⁰

<http://webarchive.nationalarchives.gov.uk/20130505040140/http://archive.defra.gov.uk/environment/marine/documents/interim2/shark-conservation-plan.pdf>

¹¹

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/224294/pb14006-shark-plan-review-20130719.pdf

- Fish and Multilateral Environmental Agreements (MEAs). Further developing a risk assessment framework for fisheries species, and application of the framework to fished shark species¹².

In 2013 the UK funded TRAFFIC¹³ to carry out work to develop a novel method for quantifying the risk posed to shark stocks from over-exploitation. This built on previous work funded by the UK which assessed the intrinsic vulnerability of shark species in order to identify which had the greatest potential risk from over-exploitation. The new work included an assessment of the management measures in place to protect shark species (M-Risk) in order to conclude where the application of multi-lateral environmental agreements such as CITES or CMS, alongside fisheries management measures, might make a tangible difference to their conservation and sustainable use. 46 medium or high risk species were chosen for this study and the result is a blueprint for a transparent, repeatable risk assessment framework suitable for application to a variety of marine species.

- National Evaluation of Populations of Threatened and Uncertain Elasmobranchs (NEPTUNE)¹⁴.

This project was completed in March 2015 and facilitated decision makers, fisheries scientists, commercial fishermen, regulators, and NGOs to work together in the south-west of England to collect more robust data for a number of species including spurdog, porbeagle, and common skate (i.e. through increased bycatch monitoring and tag and release). This has helped improve the availability of fishery-dependent information for assessing the fishery and status of the stocks and ensured that the knowledge and views of the fishing industry are incorporated into the development of practical regional and national management strategies.

- Shark By-Watch UK and Shark By-Watch UK 2

These projects were funded through the European Fisheries Fund (EFF). Their aim has been to work with industry to improve knowledge of shark, skate and ray bycatch and discarding patterns in inshore fisheries and improve fishing and handling practices in order to support more sustainable shark and ray fisheries. An important component of these projects has been the incorporation of workshops to share and develop knowledge, and the tagging and sampling of local shark, skate and ray species.

- Spurdog By-catch Avoidance Programme¹⁵

This project built on an earlier project: Common Fisheries Policy reform implementation: aligning zero quota species and improving fisheries management – a spurdog case study. An innovative by-catch avoidance tool has been developed and is currently being trialed in the UK. This tool allows fishers to report, in near real time, their encounters of spurdog which are then used to create daily advisory notes in the form of a gridded map with a

¹²<http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=18800&FromSearch=Y&Publisher=1&SearchText=TRAFFIC&SortString=ProjectCode&SortOrder=Asc&Paging=10#Description>

¹³ <http://www.traffic.org/home/2014/4/23/shark-fisheries-management-traffic-develops-new-risk-assessm.html>

¹⁴<http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=17020&FromSearch=Y&Publisher=1&SearchText=neptune&SortString=ProjectCode&SortOrder=Asc&Paging=10#Description>

¹⁵<http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=19658&FromSearch=Y&Publisher=1&SearchText=spurdog&SortString=ProjectCode&SortOrder=Asc&Paging=10#Description>

traffic light system. Fishers can then use this information and their knowledge of spurdog seasonal behaviours to avoid certain areas, thus reducing the risk of large bycatches and decreasing overall fishing mortality.

We have also commissioned research to address important data gaps in our current ability to assess and manage elasmobranch stocks whilst ensuring the sustainability of their fisheries, and will provide scientific evidence to influence emerging policy.

Provide information about monitoring activities:

**Objective B:
Ensuring that directed and non-directed fisheries for shark are sustainable**

B 1. Are species listed in Annex I caught in your nation's waters (as target or incidental catch) and in what quantity?

Check boxes:

- Yes ✓
- No ✓
- Retaining on board, transshipping or landing any part or whole carcass of basking shark (*Cetorhinus maximus*) in any fishery is prohibited.
- It is illegal to target thresher sharks in the North Atlantic, but it is legal to retain and land bycatch of Common Threshers (*Alopias vulpinus*).

[If yes]

Check boxes:

- Targeted catch
- Incidental catch ✓

[If target]

- amount caught = "figure" (choose/specify unit)

[If incidental]

- amount caught = "figure" (choose/specify unit)
- What is the fate of incidentally caught species?

UK and OMS vessel landings of thresher sharks from the UK EEZ

Year	Live Weight (Tonnes)
2012	3.1

2013	1.1
2014	4.5
2015	4.5
2016	3.3
Avg. 2012-16	3.3

- When basking sharks are accidentally caught, they are not to be harmed and promptly released.
- Incidental catches of thresher shark can be landed and sold in the UK.

B 2. What management measures (be as specific as possible) are in place for species listed on Annex I of the MOU, and when were they implemented?

B 3. Has your country prohibited the taking of species listed in CMS Appendix I?

Check boxes:

- Yes✓
- No

Describe protection measures and reasons for any exceptions:

Provide references to policy documents (legislation, management plans etc.)

The Wildlife and Countryside Act (1981)¹⁶ is an important part of UK legislation. This legislation consolidates a range of conservation commitments in England and Wales, including the Bern Convention and the EC Habitats Directive. Listing of a species under the Act makes it an offence (subject to exceptions) to intentionally kill, injure, take, possess, or trade in that animal in English and Welsh Waters. The angel shark, white skate and basking shark are already listed in the Act due to their conservation status. These species are also listed within the Common Fisheries Policy (CFP) as prohibited species which means that they cannot be landed by commercial fishers. Listing under the Act also extends this prohibition to other activities, including recreational fisheries, out to 12nm.

Additional species can be added to the Act as part of a five yearly review, whereby the Joint Nature Conservation Committee (JNCC), adviser to the UK Government on nature conservation issues, propose species in need of protection. Through this process the listing of additional shark species on the Act can be considered, where these listings would

¹⁶ <http://www.legislation.gov.uk/ukpga/1981/69/contents>

be in line with scientific advice and offer a real conservation benefit. Details on the review can be found on the JNCC website¹⁷.

In Scotland, the Nature Conservation Act (Scotland) 2004¹⁸ reformed the 1981 Act to offer similar protection for wildlife species in Scotland. In particular, it extends the protection offered to basking shark by strengthening the offence provision in relation to this species. Equivalent provisions for Northern Ireland are contained within the Wildlife (Northern Ireland) Order 1985 and the Nature Conservation and Amenity Lands (Northern Ireland) Order 1985¹⁹.

Other legislative measures have been introduced where required, an example of this is the Tope (Prohibition of Fishing) Order 2008²⁰. Following reports of plans to develop a targeted commercial tope fishery, measures were introduced to protect tope, a vulnerable European continental-shelf and coastal shark species. The Tope Order prohibits fishing for tope other than by rod and line, and sets a 45kg per day tope by-catch limit in commercial fisheries for other species. Tope landed by commercial vessels must have their head and fins still attached. Rod and line anglers fishing from boats are not allowed to land their catches ashore alive or dead. In this way both commercial and recreational fishermen share responsibility for the conservation of tope.

Additionally, the Scottish Government introduced the Sharks, Skates and Rays (Prohibition of Fishing, Transhipment and Landing) (Scotland) (Order) 2012²¹. Like the UK Tope Order, the Scottish Order provides protection for tope from both commercial and recreational fishermen. The Scottish Order also identifies a further 21 species of elasmobranch which are currently protected from commercial fishing at EU level, and extends this protection to prevent landing by the recreational sector in Scottish waters. Recreational fishermen are still permitted to fish using the 'catch and release' method.

Objective C

Ensuring to the extent practicable the protection of critical habitats and migration corridors and critical life stages of sharks

C 1. Does your country protect habitats of species listed on Annex I of the MOU?

Check boxes:

- Yes✓
- No

¹⁷ <http://jncc.defra.gov.uk/page-1377>

¹⁸ <https://www.legislation.gov.uk/asp/2004/6/contents>

¹⁹ <http://jncc.defra.gov.uk/page-3175>

²⁰ <http://www.legislation.gov.uk/uksi/2008/691/introduction/made>

²¹ <http://www.legislation.gov.uk/ssi/2012/63/contents/made>

[If yes]

Drop down menu:

- Species listed in Annex 1 of the MOU and “migratory sharks in general”
- Describe the measures taken to protect the area, when the area was protected and the size of the area.

Marine Protected Areas for Elasmobranchs

Marine Protected Areas (MPAs) can be put in place in the UK if sufficient evidence exists to show their creation will be of particular benefit to the species, for example in protecting crucial breeding or juvenile grounds. This can be done through the designation of Marine Conservation Zones (MCZs) in England, Wales and Northern Ireland or through Nature Conservation Marine Protected Areas (NCMPA) in Scotland. To date one NCMPA has been designated in Scotland to protect common skate²². Further designations are also being considered for basking shark.

Objective D

Increasing public awareness of threats to sharks and their habitats, and enhance public participation in conservation activities

D 1. Is your government taking steps to improve public knowledge on migratory sharks?

Check boxes:

- Yes✓
- No

[If yes]

Drop down menu:

Regarding...

- Sharks' importance in the ecosystem;
- Threats to sharks;
- Threats to marine and coastal habitats;
- This Memorandum of Understanding;
- International conservation policies regarding sharks; and
- Other

Describe:

²²

<https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/protected-areas/national-designations/marine-protected-areas/nature-conservation-5>

We also continue to seek ways of improving species protection without the need to regulate, for example, by inducing behavioural change and establishing codes of conduct for commercial fishers and recreational anglers. One such example is the Shark Trusts series of 'Fisheries Advisory' leaflets²³. These advisories provide information for fishermen on prohibited/protected elasmobranchs, in line with the European Union Total Allowable Catches (TACs) and Quota Regulations. These advisories have been well received by the UK fishing industry.

Objective E:

Enhancing national, regional and international cooperation

E 1. Has your country identified areas where cooperation among States is required for successful conservation and management activities?

Check boxes:

- Yes✓
- No

[If yes]

Describe:

The EU Common Fisheries Policy (CFP) provides the framework for the protection and management of commercial fish species, including some sharks, for EU vessels in all waters. The UK supports the establishment of scientifically justified catch limits where these are supported by evidence. Several species such as angel shark, basking shark, white shark, and porbeagle shark are listed as prohibited species.

Fins Naturally Attached. In 2009 the UK Government implemented regulation that required all sharks be landed with their 'fins naturally attached' to ensure shark finning cannot take place on UK-registered vessels. Since that time the UK has continued to promote this practice, strongly supporting an amendment to the EU Finning Ban (Regulation (EU) No 605/2013 amending Council Regulation (EC) No 1185/2003) to require all sharks caught by the EU fleet to be landed with their fins still naturally attached to their body. We continue to speak out for this practice to be adopted globally.

The UK proactively engages in OSPAR (The Convention for the Protection of the marine Environment of the North-East Atlantic) to ensure greater protection of sharks is afforded. OSPAR has undertaken work to determine those species that occur within the convention area and may need protection. This work resulted in the development of the List of Threatened and/or Declining Species and Habitats, which includes 11 elasmobranch species, in order to steer priorities for further work on the conservation and protection of marine biodiversity²⁴.

The UK engages actively in international fora where we consider the most benefit will arise for the conservation and management of sharks. In particular within Regional Fisheries Management Organisations (RFMOs), CITES, CMS and the CMS Sharks MoU.

²³ https://www.sharktrust.org/en/fisheries_advisories

²⁴ <https://www.ospar.org/work-areas/bdc/species-habitats/list-of-threatened-declining-species-habitats>

The UK considers involvement within RFMOs as an important step in ensuring that appropriate management and protection is in place. Much has been achieved to date in the RFMOs, especially within the International Commission for the Conservation of Atlantic Tunas (ICCAT) and the Indian Ocean Tuna Commission (IOTC). However, the UK continues to support further measures be implemented within RFMOs, specifically catch limits for commercially exploited elasmobranch species such as blue shark and shortfin mako shark, prohibitions on landings for vulnerable species such as porbeagle, and Fins Naturally Attached.

The UK considers CITES to be an important means of regulating trade in vulnerable marine species, complementing current fisheries controls. It also provides crucial data on the utilisation of species of commercial interest and supports their sustainable use. The UK will continue to press for appropriate management of trade in elasmobranchs under CITES and build on the successes of the last CITES Conference of the Parties (CoP) where we worked hard to help secure the protection of five species of shark and two species of manta ray. Of these species, the oceanic whitetip shark and the three species of hammerhead shark make up a significant proportion of the shark fin trade. This Appendix II listing means that these species will be given more protection from unmanaged and unsustainable trade in their fins.

CMS provides a global platform for the conservation of migratory animals and their habitats. The UK supports the listing of shark species on CMS which compliment fisheries management efforts within the Regional Fisheries Management Organisations (RFMOs).

The UK views the CMS Shark MoU as an important forum for working with other likeminded countries to improve global conservation and management of sharks and develop shared understandings and objectives to take into other important fora such as CITES. The UK signed the Shark MoU in June 2012 (also on behalf of a number of our Overseas Territories and Crown Dependencies).

E 2. Has your country engaged with other States to address these areas?

Check boxes:

- Yes
- No

[If yes]

Describe:

E 3. Has there been any cooperation between your country and other countries on developing institutional capacity and/or competencies in:

Check boxes:

- Yes
- No

[If yes]

Drop down menu:

- Shark identification
- Management and conservation techniques
- Habitat protection
- Coordination with other stakeholders
- Implementation of this Memorandum of Understanding
- Other

Describe:

- III. Please provide any additional information relevant to the Conservation Plan for species listed on Annex 1, or in general, provide any information about what you know about sharks in your waters.**

Describe:

- IV. Have you identified any gaps or needs in the field of research, capacity-building, training, data collection etc. relevant to the conservation of Annex 1 species?**

Describe:

We have also commissioned research to address important data gaps in our current ability to assess and manage elasmobranch stocks whilst ensuring the sustainability of their fisheries, and will provide scientific evidence to influence emerging policy.