Memorandum of Understanding between the Kingdom of Norway and the International Council for the Exploration of the Sea

RECOGNISING that the Kingdom of Norway (referred in this document as "Norway")

- a) is an ICES Member Country;
- b) is a competent authority for managing fish stocks in North Atlantic and performs its functions in the interests of the conservation and optimum utilisation of the fishery resources and shall take into account the best scientific evidence available;
- c) has a responsibility for the protection of the marine environment and exclusive competence for the conservation, management, and exploitation of living marine resources in waters under its jurisdiction;
- d) has established the Marine Resources act, which encompasses all wild living marine resources and the genetic material derived from them, with the purpose of ensuring sustainable and economically profitable management and to promote employment and settlement in coastal communities;
- e) aims to ensure that exploitation of the resources secure biodiversity and restores and maintains marine populations of economically important harvested species above levels consistent with the precautionary approach, as appropriate;
- f) seeks services and scientific advisory deliverables from ICES for scientific advice and information on conservation, protection and sustainable use of the marine environment, fisheries and marine data and issues regarding marine science, and marine research;
- g) seeks services and scientific advisory deliverables from ICES for scientific advice and information on sustainable aquaculture.

RECOGNISING that the International Council for the Exploration of the Sea ("ICES")

- a) has the mission to advance the scientific capacity to give advice on human activities affecting, and affected by, marine ecosystems;
- b) is a science community that is able to address issues of relevance to the exploitation of living marine resources;
- exists to promote and encourage research and investigations for the study of the sea, to advance the scientific understanding of marine ecosystems, including its living resources;
- d) draws up the necessary programmes and organises such research and investigations as may appear necessary and publishes and disseminates the results of this work;
- e) provides scientific information and advice to Contracting Parties, and the regulatory commissions with which cooperative relationships have been established;
- f) seeks to establish and maintain working arrangements with other international organizations and arrangements having related objectives;
- g) does not engage in the collection of primary data, and only conducts scientific research through the associated network of data providers. ICES has no authority to manage or direct the work of the data providing entities. ICES Advice is based on data inputs from relevant data providers, these data inputs are provided through a data call process or agreed published data provision timetable, and made available through the ICES databases.
- h) ICES advisory process relies on active participation of ICES experts with relevant and necessary expertise from ICES member countries. ICES only conducts scientific

research through the associated network of research institutes. ICES has no authority to manage or direct the work of the research institutes.

Norway and ICES have therefore reached the following understanding:

Provision of Scientific Information and Advice

- 1. ICES will provide Norway with scientific information and advice, which is independent and free from political influence and subject to international scientific standards for research and evidence-based advice. The basis for the advice is subject to an open and transparent process that includes independent peer review. The geographical scope of the Memorandum of Understanding is the North Atlantic, and its adjacent seas;
- 2. ICES and Norway will consult on ways in which cooperation between them can be further improved and extended. To this end the Parties will exchange documents and reports of mutual interest. Further improvements may include joint activities, e.g. seminars, symposia, or other meetings;
- 3. Norway is obligated to provide ICES with all relevant data for scientific analysis (Annex 5) under the ICES Data Policy. All data are by default publicly available except those referred to as excluded in the ICES data policy as listed on the ICES Data Policy web page¹. Specific policies^{2,3} are in place to ensure the confidentiality obligations of the data provider;
 - a. The ICES Data Policy states that the quality assurance of data is the responsibility of the data provider. ICES may perform additional quality control of the aggregated data used in assessments and shall decide which data are considered a useful basis for advice.
 - b. ICES will in the background documentation and where relevant in the advice describe which data were used and qualitatively describe sources of uncertainty affecting the assessment. ICES will also explain both the internal and external quality control procedures used for all advice.
- 4. ICES agrees to provide Norway with:
 - a. annual "recurring" advice in the context of ecosystems, fisheries and fishing opportunities as outlined in Annex 1 and 2 and with the schedule as outlined in Annex 3;
 - b. "non-recurring advice" as agreed separately between Norway and ICES in response to requests from Norway;
 - c. the information on which the advice is based (inter alia, Expert Group Reports including peer review reports). This information shall be publicly available following the ICES review process.;
- 5. If requested by Norway, the Chair or designate of the ICES Advisory Committee will present the scientific information and advice to Norway. An ICES professional officer will also be invited to the meetings;
- 6. ICES will notify Norway when the advice is released on the ICES website;
- 7. Norway shall be consulted about any changes to the format of the advice or changes in the stock composition/area definition in Annex 2.
- 8. If a request from another advice requester may influence the content or format of presentation of the recurrent advice for stocks in table 1, ICES shall immediately inform and consult with Norway.

³ http://ices.dk/marine-data/Documents/VMS DataAccess ICES.pdf



¹ http://ices.dk/marine-data/guidelines-and-policy/Pages/ICES-data-policy.aspx

² http://ices.dk/marine-data/Documents/Data Policy RDB.pdf

9. In the event that necessary data is not provided or scientific work is not completed and as a result ICES can not to fulfil its obligations under this agreement, ICES shall inform Norway of the nature, detail, and consequences of such shortfalls. Norway understands that ICES will be unable to fulfil the Agreement should this occur.

Finance

- 10. Norway accepts ICES policy of achieving 100% cost recovery from Member Countries and international client commissions that request ICES to provide information, advice, and services. When assessing the contributions to be paid by Norway, due account shall be taken of contributions made by ICES Member Countries or international client commissions of ICES with interests in the same issues and in the same geographical area. Against this background, the Parties shall consult and agree:
 - a. on a fixed annual price for the recurring advice for the period of the MoU, regulated in accordance with the official rate of inflation in Denmark;
 - b. to revise Annex 1 when appropriate;
 - c. to determine the cost for evaluation of stocks that Norway shares with other ICES Member Countries or other international client commissions of ICES;

11. Norway agrees to

- a. pay following the procedure in Annex 3 an amount as agreed upon with ICES for "recurring" advice as outlined in Annex 1 and 2, The components upon which the ICES costs are calculated are provided in Annex 4, and the agreed cost share key which is basis for the costs for 2023 are provided in Annex 6;
- b. to pay 100% of the costs for non-recurring advice on the basis of the costs agreed upon with ICES in accordance with procedures established in Annex 3 and cost components as identified in Annex 4.

General Administrative Arrangements

- 11. The MoU was originally established in 2016 and then revised and renewed in 2019. The current MoU will apply following the signature by both parties and enter in force by the date of signature;
- 12. The Parties will meet annually, preferable in the beginning of the year to consult on the deliverables and discuss other issues of relevance for this MoU. ICES is responsible to arrange this annual meeting;
- 13. Either Party may propose amendments to this MoU. Any such proposal will be made in due time before the annual meeting;
- 14. Every third year after entering in to force the MoU shall be reviewed by the Parties, and if necessary revised. The Parties will meet well in advance to carry out a full review of its terms and operation, and to agree any necessary amendments;
- 15. If any dispute should arise between the Parties on the interpretation and application of the MoU, both sides will make their best endeavour to resolve it, if necessary by the involvement of a mutually agreeable arbiter;
- 16. The MoU may be terminated by either Party with a notification in writing of one year.
- 17. All the correspondence concerning the present MoU shall be in written form and shall be forwarded to the following addresses:

- a. For Norway:
 Royal Ministry of Trade, Industry and Fisheries

 Post-box 8090 Dep 0032 Oslo
 Norway
- For ICES:
 International Council for the Exploration of the Sea
 H.C. Andersens Boulevard 44-46
 DK-1553 Copenhagen V
 Denmark

Signed on behalf of the International Council for the Exploration of the Sea and the Kingdom of Norway:

For ICES, For the Kingdom of Norway,

Dr Alan Haynie Ms. Elisabeth Norgård Gabrielsen

General Secretary Director General

signature: Flish No

Done in Bergen,, in duplicate in English

Annex 1: Recurring advice required from ICES

Recurring advice⁴ shall be given in the context of:

- a) Ecosystems
- b) Fisheries
- c) Fishing opportunities, catch, and effort.

General context of ICES advice

With respect to the policy context of the advisory deliverables ICES advice is set by several international agreements and policies:

- United Nations Convention on the Law of the Sea (UN, 1982 (known as UNCLOS)), which includes a call for a maximum sustainable yield (MSY) approach to managing fisheries;
- United Nations Conference on Environment and Development (UN, 1992a (known as UNCED)), including Chapter 17 of Agenda 21 which highlights a precautionary approach;
- United Nations Straddling Fish Stocks Agreement of 1995 (UN, 1995 (known as the UN Fish Stocks Agreement or UNFSA)) and the FAO Code of Conduct for Responsible Fisheries (FAO, 1995), both of which call for a precautionary approach;
- Convention on Biological Diversity (UN, 1992b (known as CBD)), which calls for conservation of biological diversity through an ecosystem approach;
- Johannesburg Declaration of the World Summit on Sustainable Development (UN, 2002 (known as WSSD)), which calls for an ecosystem approach and rebuilding fisheries to maximum sustainable yield.

The advisory deliverables shall also take into account the legal management framework adopted by Norway. The advisory deliverables should also be given in the context of international agreements and guidelines to which Norway has signed and ratified. Norway will inform ICES of any new ratified agreements as well as annual fisheries agreements in the format Agreed Records.

Ecosystem and Fisheries advice

ICES will develop a process to incorporate the following advice into overviews:

- a) Assess the extent to which fishing disturbs the marine ecosystems and, where reference levels have been established, compare the impact to the reference level chosen.
- b) Provide any new information regarding the impact of fisheries on other components of the ecosystem including marine mammals, sea birds, and sensitive habitats.
- c) Inform Norway of any notable impact of other factors on and imbalances in ecosystem structure that may prejudice the stocks of commercially valuable species and its long term exploitation;
- d) Propose reference points as guidance for management purposes in an ecosystem context.

⁴ Advice which is adopted by ICES Advisory Committee (ACOM)

e) ICES will in addition give warnings of any serious and/or potential environmental impacts from fishing activities alone or in conjunction with any other relevant activity to local ecosystems or species as soon as they are detected.

The advice shall be based on an ecosystem approach. This will be implemented incrementally so that any information on interactions between fisheries, fish stocks, and marine ecosystem is considered and incorporated in the advice as it becomes available. Examples include the estimation of bycatch on populations of protected, sensitive and threatened species, the impact of trawling on the seabed and the impact of the variability of the ecosystem on fishing opportunities.

When providing its advice, ICES shall take account of all available information and the context of fisheries management including information from the fishing industry, ecosystem considerations, environment and hydrographical conditions, regulations in force that affect fisheries, factors affecting fishing operations and information about the fisheries, development of fisheries technology and relevant performance changes and other relevant factors that affect fishing or fish stocks.

Advice on fishing opportunities, catch, and effort

ICES' approach to advice on fishing opportunities integrates ecosystem-based management with the objective of achieving maximum sustainable yield (MSY). The advice rule applied by ICES in developing the advice on fishing opportunities depends on management strategies agreed by relevant management parties/authorities and the information and knowledge available for the concerned stocks. If the relevant management parties/authorities have agreed on a management plan or strategy and the plan/strategy has been evaluated by ICES to be consistent with the precautionary approach, ICES will provide advice in accordance with the plan/strategy. If not, ICES will provide advice applying the ICES MSY advice rule if possible or the precautionary approach if the information on the stocks is insufficient to support the MSY rule.

When ICES issue fleet-based MSY advice ICES will indicate for which fleets the catches are assumed, irrespective of the advice, and for which fleets the catches are given as part of the F_{msy} approach.

ICES MSY advice rule requires a relative high level of data and knowledge on the dynamics of the stocks concerned. If the data and knowledge requirements are not fulfilled ICES cannot provide advice consistent with MSY; instead ICES applies an advice rule that is only based on precautionary considerations.

For stocks that are shared between Norway and other Clients the basis for the headline advice are agreed and evaluated management strategies between Coastal States. If such agreed management strategies do not exist, ICES will base the headline advice upon the standard ICES advice rules.

Norway will receive management advice on fishing opportunities for the commercial fishery and, where relevant, for recreational catches or fisheries, for the stocks and areas in Table 1, Annex 2 with reference to the policy basis for that advice.

ICES will for each stock listed in the table 1, Annex 2 in addition to the advice on fishing opportunities provide information on:

- b) The historical developments in spawning stock biomass, total stock biomass, fishing mortality, and catches.
- c) The state of the stocks and fisheries relative to agreed reference points.

In support of its advice ICES shall provide Norway with:

- c) A full methodological description of the assessment and advisory procedure for each stock, updated whenever a significant change is made;
- d) Estimates of landings, fishing mortality, recruitment and spawning stock together with information or estimates of the uncertainty with which these parameters are estimated. These data shall be provided electronically;
- e) Estimates of relevant reference points for management;
- f) On request, complete records of data used for assessment purposes shall be provided. These data shall be provided electronically;

Such information should be provided whenever significant changes are made or can be detected, but not normally more frequently than implied by the schedule in Annex 3. However, Norway should be informed immediately of any new information indicating previously unforeseen ecological consequences.

The recurring advice regarding fishing opportunities should be based on:

- i) Management plans/ strategies, if they are considered precautionary by ICES and relevant management parties/authorities agrees that the management plan should be the basis for advice;
- ii) The ICES MSY approach, if the management plans / strategies do not fulfil both requirements listed above;
- iii) The Precautionary Approach, in the lack of defined MSY reference points.

When possible, ICES will present a set of options in the catch scenario table, including the highest level of fishing that may be considered precautionary. If requested, ICES will present catch scenarios resulting from applying unilateral Norwegian management plans.

Advice from ICES shall in all cases take account of the accuracy and precision of the available assessments and forecasts. Information about the accuracy and precision of assessments and forecasts shall be presented and considered in the advice. ICES should inform Norway immediately in the event that uncertainty in the assessment prevents advice being given according to the agreed basis for the advice.

ICES shall present short term implications of variable management options, when adequate data are available, expressed as quantified consequences of the management measures currently implemented for that stock or fishery. For the management year (or years in the case of multi-annual management regimes), the short-term consequences of relevant management measures should be given for relevant intervals of action while reflecting the uncertainties regarding expected outcomes. In cases where data are insufficient to provide the basis for quantitative advice ICES shall provide information on the reasons for this deficiency and advice on management measures which, given the uncertainties, are considered consistent with the Precautionary Approach.

ICES shall provide advice on fishing opportunities and information as outlined above for the stock listed in Table 1, Annex 2. below.

Advice shall normally be provided for each calendar year. However, for stocks where measurement uncertainty is low compared to the expected magnitude of changes in stock size advice may be provided at intervals greater than each year. For short-lived species and highly seasonal fisheries, the timing of the advice shall be adapted as appropriate.

In-year re-assessments for stocks and fisheries will be carried out following procedures adopted by ICES, including updates if ICES considers that new data becoming available would significantly change conclusions regarding ICES advice.

Quality assurance of advice deliverables

ICES quality assurance of advisory products covers the entire chain from data collection to publication of advice. ICES has taken a large number of initiatives to quality assure the advisory products. In recent years, focus has been on data quality, transparency, and enhancement of the advisory framework, mainly through the development of guidelines.

The Stock Assessment Graph Database and Stock Information Database online portals provide a comprehensive publicly accessible status of approximately 200 assessed stocks, including their historical performance, confidence intervals and with all supporting metadata that ensure consistency and a means to generate new data calls based upon the most current available information.

A full methodological description of the assessment, data used and advisory procedure for each stock, updated whenever significant changes are made, including reference to new methods will be made available in the Transparent Assessment Framework (TAF). Documentation of each assessment, with information on the lineage of data used in assessment, will be adequate to allow recalculation of any assessment or catch projection by an external expert, with reference to publicly available web-based data as required. All ICES assessments are expected to be functional in TAF by 2021.

ICES will provide a description of the benchmarking process including an overview of the different benchmark exercises foreseen in the coming 24 months. This submission includes a timeline and planning of the benchmark exercises listed.

Annex 2

The table below shows the gross list of stocks for which ICES provides advice to Norway.⁵ The list of species for which Norway request recurrent advice may be amended on an annual basis - either by a written procedure or at the annual consultations with ICES referred to in paragraph 12. Norway may want to discuss the relevant areas for some of the stocks in the table during the period for this MoU.

Species	Stock*	
Anglerfish	Anglerfish (Lophius budegassa, Lophius piscatorius) in Subareas 4 and 6, and Division 3.a (North Sea, Rockall and West of Scotland, Skagerrak and Kattegat	anf.27.3a46
Blue whiting	Blue whiting (Micromesistius poutassou) in subareas 1–9, 12, and 14 (Northeast Atlantic and adjacent waters)	whb.27.1-91214
Capelin	Capelin (Mallotus villosus) in subareas 1 and 2 (Northeast Arctic), excluding Division 2.a west of 5°W (Barents Sea capelin)	cap.27.1-2
Capelin	Capelin (Mallotus villosus) in subareas 5 and 14 and Division 2.a west of 5°W (Iceland and Faroes grounds, East Greenland, Jan Mayen area)	cap.27.2a514
Cod	Cod (Gadus morhua) in Subarea 4, Division 7.d, and Subdivision 20 (North Sea, eastern English Channel, Skagerrak)	cod.27.47d20
Cod	Cod (<i>Gadus morhua</i>) in subareas 1 and 2 (Northeast Arctic)	cod.27.1-2
Cod	Cod (<i>Gadus morhua</i>) in subareas 1 and 2 north of 67°N (Norwegian Sea and Barents Sea), northern Norwegian coastal cod	cod.27.1-2coastN
Cod	Cod (<i>Gadus morhua</i>) in Subarea 2 between 62°N and 67°N (Norwegian Sea), southern Norwegian coastal cod	cod.27.2coastS
Flounder	Flounder (Platichthys flesus) in Subarea 4 and Division 3.a (North Sea, Skagerrak and Kattegat)	fle.27.3a4
Golden redfish	Golden redfish (Sebastes norvegicus) in subareas 1 and 2 (Northeast Arctic)	Reg.27.1-2
Greater silver smelt	Greater silver smelt (<i>Argentina silus</i>) in subareas 1, 2, and 4, and in Division 3.a (Northeast Arctic, North Sea, Skagerrak and Kattegat)	aru.27.123a4
Greenland halibut	Greenland halibut (<i>Reinhardtius</i> hippoglossoides) in subareas 1 and 2 (Northeast Arctic)	ghl.27.1-2

⁵ This list is of no consequence with respect to Norway's present or future claims to any of the stocks mentioned.

Haddock	Haddock (Melanogrammus aeglefinus) in Subarea 4, Division 6.a, and Subdivision 20 (North Sea, West of Scotland, Skagerrak)	had.27.46a20
Haddock	Haddock (<i>Melanogrammus aeglefinus</i>) in subareas 1 and 2 (Northeast Arctic)	had.27.1-2
Hake	Hake (Merluccius merluccius) in subareas 4, 6, and 7, and in divisions 3.a, 8.a-b, and 8.d, Northern stock (Greater North Sea, Celtic Seas, and the northern Bay of Biscay)	hke.27.3a46-8abd
Herring	Herring (Clupea harengus) in subdivisions 20–24, spring spawners (Skagerrak, Kattegat, and western Baltic)	her.27.20-24
Herring	Herring (Clupea harengus) in Subarea 4 and divisions 3.a and 7.d, autumn spawners (North Sea, Skagerrak and Kattegat, eastern English Channel)	her.27.3a47d
Herring	Herring (Clupea harengus) in subareas 1, 2, and 5, and in divisions 4.a and 14.a, Norwegian spring-spawning herring (the Northeast Atlantic and the Arctic Ocean)	her.27.1-24a514a
Horse mackerel	Horse mackerel (Trachurus trachurus) in divisions 3.a, 4.b–c, and 7.d (Skagerrak and Kattegat, southern and central North Sea, eastern English Channel)	hom.3a4bc7d
Horse mackerel	Horse mackerel (<i>Trachurus trachurus</i>) in Subarea 8 and divisions 2.a, 4.a, 5.b, 6.a, 7.a–c, and 7.e–k (the Northeast Atlantic)	hom.27.2a4a5b6a7a-ce-k8
Ling	Ling (<i>Molva molva</i>) in subareas 1 and 2 (Northeast Arctic)	lin.27.1-2
Mackerel	Mackerel (Scomber scombrus) in subareas 1–8 and 14, and in Division 9.a (the Northeast Atlantic and adjacent waters)	mac.27.nea
Northern shrimp	Northern shrimp (Pandalus borealis) in subareas 1 and 2 (Northeast Arctic)	Pra.27.1-2
Northern shrimp	Northern shrimp (Pandalus borealis) in Division 4.a West (northern North Sea, Fladen Ground)	Pra.27.4a
Northern shrimp	Northern shrimp (Pandalus borealis) in divisions 3.a and 4.a East (Skagerrak and Kattegat and northern North Sea in the Norwegian Deep)	pra.27.3a4a
Norway lobster	Norway lobster (Nephrops norvegicus) in Division 4.a, Functional Unit 32 (northern North Sea, Norway Deep)	Nep.fu.32
Norway lobster	Norway lobster (Nephrops norvegicus) in Division 3.a, functional units 3 and 4 (Skagerrak and Kattegat)	nep.fu.3-4
Norway lobster	Norway lobster (Nephrops norvegicus) in Division 4.a, Functional Unit 7 (northern North Sea, Fladen Ground)	nep.fu.7
Norway lobster	Norway lobster (Nephrops norvegicus) in Subarea 4, outside the functional units (North Sea)	Nep.27.4outFU

Norway pout	Norway pout (Trisopterus esmarkii) in Subarea 4 and Division 3.a (North Sea, Skagerrak and Kattegat)	Nop.27.3a4
Plaice	Plaice (Pleuronectes platessa) in Subarea 4 (North Sea) and Subdivision 20 (Skagerrak)	Ple.27.420
Roundnose grenadier	Roundnose grenadier (Coryphaenoides rupestris) in Division 3.a (Skagerrak and Kattegat)	rng.27.3a
Saithe	Saithe (<i>Pollachius virens</i>) in subareas 4 and 6, and in Division 3.a (North Sea, Rockall and West of Scotland, Skagerrak and Kattegat)	pok.27.3a46
Saithe	Saithe (<i>Pollachius virens</i>) in subareas 1 and 2 (Northeast Arctic)	pok.27.1-2
Sandeel	Sandeel (Ammodytes spp.) in Divisions 4.a and 4.b, and Subdivision 20, Sandeel Area 3r (Skagerrak, northern and central North Sea)	san.sa.3r
Sandeel	Sandeel (Ammodytes spp.) in Division 4.a, Sandeel Area 5r (Northern North Sea, Viking and Bergen banks)	san.sa.5r
Beaked redfish	Beaked redfish (Sebastes mentella) in subareas 1 and 2 (Northeast Arctic)	reb.27.1-2
Sprat	Sprat (Sprattus sprattus) in Division 3.a and Subarea 4 (Skagerrak, Kattegat, and North Sea)	spr.27.3a4
Turbot	Turbot (Scophthalmus maximus) in Division 3.a (Skagerrak and Kattegat)	tur.27.3a
Turbot	Turbot (Scophthalmus maximus) in Subarea 4 (North Sea)	tur.27.4
Tusk	Tusk (<i>Brosme brosme</i>) in subareas 1 and 2 (Northeast Arctic)	usk.27.1-2
Tusk	Tusk (<i>Brosme brosme</i>) in subareas 4 and 7–9, and in divisions 3.a, 5.b, 6.a, and 12.b (Northeast Atlantic)	usk.27.3a45b6a7-912b
Whiting	Whiting (Merlangius merlangus) in Subarea 4 and Division 7.d (North Sea and eastern English Channel)	whg.27.47d
Whiting	Whiting (Merlangius merlangus) in Division 3.a (Skagerrak and Kattegat)	whg.27.3a
Spurdog	Spurdog (Squalus acanthias) in subareas 1– 10, 12, and 14 (the Northeast Atlantic and adjacent waters)	dgs.27.nea
Porbeagle	Porbeagle (Lamna nasus) in subareas 1–10, 12, and 14 (the Northeast Atlantic and adjacent waters)	por.27.nea
Eel	European eel (Anguilla anguilla) throughout its natural range	ele.2737.nea
Harp seal	Greenland sea	
Harp seal	Barents Sea/White Sea	
Hooded seal	Greenland Sea	

^{*} ICES will inform Norway on any revisions of the stock definitions before the release of its advice.

Annex 3: Schedule of key annual administrative procedures for Norway and ICES

A. Schedule for the advice planning, budgeting and payment

November: Norway formally communicates to ICES an update of its views and priorities with respect to the contents and timing of recurrent advice concerning the next calendar year to ICES.

Mid December: ICES proposes a budget for the delivery of recurrent advice for the next calendar year to be agreed at the annual meeting.

January - February: Annual meeting.

March: Payment by Norway for recurrent advice in current calendar year.

B. Schedule for the Provision of Non-recurring Advice

The table specifies the procedures to be undertaken by both Parties when arranging the provision of non-recurring advice, including advice on sustainable aquaculture.

Norway	ICES
1. Requests for advice to be sent by letter or e-mail to ICES specifying the desired advice and the timescale within which advice is desired. In case of e-mail correspondence the address should be advice@ices.dk	 2. ICES will respond within 21 working days specifying: The nature and extent of the work that can be completed within the specified timeframe; The extent to which the questions posed can be answered; The extent to which the work is of mutual interest and in such case proposal for cost sharing. The additional costs to be recovered
3. Norway will respond within 7 days confirming whether the work is to be undertaken.	from Norway. 4. If so agreed, ICES will deliver the advice according to the agreed timescale.

Annex 4: Components upon which ICES costs are calculated

The text below should be read in conjunction with the document "Temporary calculations for costs for providing advice" (Temporarily added as Annex 6).

The Parties agree that the payment is based on the following;

- i. the costs of databases and analyses that are needed in order to prepare advice, but generally would not occur otherwise,
- ii. the preparation, quality assurance and delivery of the advice,
- iii. salary costs incurred for the leadership of the Advisory Committee,
- iv. salary costs incurred for the ICES Secretariat Advisory programme.
- v. other direct costs associated with the provision of advisory services

On the basis of this recognition, the following cost components are relevant;

- 1. Costs incurred by ICES (i.e. travel and *per diem*) related to meetings of its Advisory groups in proportion to the time of these meetings spent on advice related to Norway;
- 2. Secretariat staff salaries, including superannuating (with an indication of the number and grades of staff to be involved in the work), regarding preparation for, work during and follow-up after:
 - 2.1 the ICES Advisory Committee Meetings^(*),in proportion to the agreed Norwegian share; and
 - 2.2 and other recurring needs associated with ICES Experts Group Meetings, in proportion to the agreed Norwegian share;
- 3. Travel and *per diem* costs for the Chair of the Advisory Committee (or a designate) or other scientifically-qualified personnel in attending meetings with Norway, as stipulated in paragraph 7 of the agreement. The number of these meetings at which ICES shall be represented will be mutually agreed beforehand.
- 4. Databases, web portal systems and data processing software relevant to the collection, processing and dissemination of data and information products that will be used in the provision of scientific information and advice^(*);
- 5. Computing costs^(*);
- 6. the cost of any work where ICES proposes to employ a consultant or contractor (*);
- 7. other current expenditure^(*);
- 8. A stipend for the chair and vice chairs of the ICES Advisory Committee, in proportion to the agreed Norway share;
- 9. A contribution to the Advisory Programme including the use of external reviewers, in proportion to the agreed Norway share
- 10. Overheads^(**). The overhead costs will be calculated by means of a fixed overhead percentage of 7% for recurrent advice which is applied to the total costs of each different activity mentioned in the ICES Work Programme. Overheads are based on the documented annual costs (e.g. invoices and payments) of running ICES headquarters so that the Secretariat staff may carry out their duties.
- (*) In proportion to the costs allocated to the total delivery of advice.
- (**) The overhead percentage covers the following types of indirect costs, and the share of these that cannot be allocated directly to specific tasks, such as:
 - a) capital cost of computing and other capital equipment;
 - b) central financial and personnel administration;
 - c) computer system support and maintenance;

- d) rent of premises (excluding ICES premises);
- e) office expenses including electricity, heating, watchmen, safety and security, cleaning costs, maintenance costs (e.g. photocopier), consumables, postage, telephone and fax, office equipment, insurance, general office maintenance (e.g. painting) and staff education and training.

Annex 5 Data Collection Agreement

Data collection is the responsibility of ICES Member Countries, and while ICES has a clear responsibility to quality assure data used in advice it relies on national processes on which ICES has very limited influence. ICES current work on databases, data submission standards and procedures, and data processing is crucial for the quality assurance for provision of the advice deliverables. As a contracting party to ICES, Norway has made an agreement under Article 1(b) of the Convention for the International Council for the Exploration of the Sea that ICES shall organise programmes of research and investigation as may appear necessary to support investigations into the living resources of the sea.

For all stocks specified in table 1 of Annex 2, and for any additional non-recurrent advice, as well as any data collection that are coordinated at the regional level, the scope of relevant data includes:

- 1. Fisheries independent survey data, details of which are specified in annual data calls. Research surveys at sea are an important method for collecting biological data. In view of their importance in marine regions where stocks are shared, it is important for a sufficient number of research surveys at sea to be carried out. Norway will determine the appropriate level of survey effort in consultation with ICES.
- 2. Fisheries dependent data, details of which are specified in annual data calls. Including:
 - biological data on all stocks caught or by-caught in commercial and, where appropriate, recreational fisheries including eels and salmon in their relevant waters.
 - ii. data to assess the impact of fisheries on the marine ecosystem including by-catch of non-target species, in particular species protected under international law, data on impacts of fisheries on marine habitats, including vulnerable marine areas, and data on impacts of fisheries on food webs;
 - data on the activity of fishing vessels in and outside Norwegian waters, including levels of fishing, and on effort and capacity of the fleet;
- 3. Other data that supports the Ecosystem Approach and the Fisheries and Ecosystem overviews that are part of the ICES advice deliverables to Norway.

Annex 6; Cost share calculations for costs for providing advice

Below is an explanation of the basis for calculations of costs for providing advice to Norway under the MoU with ICES.

"Without prejudice" Clause

The text below constitutes the basis for the calculations that ICES has made to cost the advice to Norway under the MoU, according to an agreed cost-sharing key.

Transparency and equal processes

The interim/temporary costing is based on the same procedures and processes for all advice requesters, including;

- 7% overhead
- Transforming previously indirect costs into direct costs

No attempt has been made to make a comprehensive costing of required Research and Development underpinning the Advice.

Basis for the costing

We have listed all stocks for which we give advice, and have indicated the advice requesters for each stock. In cases where a stock is shared (=being requested by several clients), we have shared the stock equally between the clients e.g. in case of three advice requesters being interested in a stock, the costs are shared between them in the magnitude of 0.33.

We have then divided the total costs of the advisory services with the total number of stocks, and multiplied this with the weighted number of stocks for each of the advice requester, to find the costs applicable to them.

Additional charge averaging the last five years equity investments

Based on an average of the equity investment in the last five years, Inter Governmental Organisation (IGO) advisory clients will be charged an additional sum for maintaining and developing advice related services. The averaged equity investment will be divided between ICES member countries and IGO advisory clients reflecting the ratio between the national contributions and the income from advisory clients (55% vs 45 %).

ICES member countries, requesting advice will not be charged the averaged equity investment, as equity is a saving based on surplus in national contributions, given that advice requesters have not covered 100% for their advisory products. Also, ICES member countries are already charged 55% of the averaged equity investment.

Minimum charge independent of number of stocks for which recurrent advice is requested

ICES charges a minimum fee for maintaining, and developing the capacity to provide recurrent advice, independent of the number of stocks for which advice is being requested. Advice requesters paying the minimum charge will be exempted from the averaged 5-year equity investment charge.

