

Bijlage

Bij de brief aan de Tweede Kamer betreffende de Bescherming van offshore Natura 2000 gebieden in de Noordzee en start aanwijzingsprocedure mariene Natura 2000-gebieden Moties Slob-Geurts (Kamerstuk 32002 nr. 32 en nr. 33)

Met deze bijlage ga ik dieper in op de uitvoering van de motie TK 32002, nr. 32 van de leden Slob en Geurts van 23 mei 2013.

FIMPAS

De maatregelen zoals hieronder beschreven zijn tot stand gekomen in de periode 2009-2013 in een zorgvuldig en uitvoerig proces, dat open en transparant is verlopen en waarin belanghebbenden actief hebben deelgenomen (Fisheries in Marine Protected Areas, FIMPAS). Betrokken waren het visserijbedrijfsleven, natuurorganisaties, overheden en wetenschappelijk instituten uit de betrokken lidstaten (vooral Nederland, Duitsland, Denemarken, Verenigd Koninkrijk, maar ook partijen uit België, Frankrijk en Noorwegen hebben deelgenomen). De maatregelen zijn ontwikkeld op basis van wetenschappelijke analyses, door belanghebbenden aangedragen informatie en kennis, en de best beschikbare data. Het hele proces is in opdracht van Nederland geleid door dr. Paul Connolly, Director of Fisheries Ecosystems Advisory Services van het Ierse Marine Institute en tevens Voorzitter van The International Council for the Exploration of the Sea (ICES). Drie breed toegankelijke workshops zijn gehouden waar getoetst is of voldoende kennis beschikbaar is, wat de belangrijkste bedreigingen voor de instandhouding van de genoemde gebieden zijn en welke maatregelen nodig zijn.

Voor de Doggersbank is een apart traject gevolgd. In dat traject is een stuurgroep ingesteld met als leden: Nederland, VK, Duitsland, Denemarken, de EC, de visserij organisaties, de natuurbeschermingsorganisaties, ICES en de Noordzee NSAC (North Sea Advisory Council, adviesgroep van de Europese Commissie waarin visserijsector en natuurorganisaties zitting hebben). De Stuurgroep werd wetenschappelijk ter zijde gestaan door ICES in gezamenlijke opdracht van VK en Nederland.

Medio 2012 is een formeel wetenschappelijk advies gevraagd en gekregen van ICES (zie appendix 1 bij deze bijlage). De nu voorliggende voorstellen zijn op dit wetenschappelijk advies gebaseerd.

Een korte samenvatting van de doorlopen processtappen van 2008 tot 2013 is opgenomen in appendix 2. In deze bijlage bij appendix 3 bevindt zich een overzichtskaart van de Natura 2000 gebieden op de Nederlandse Noordzee.

Inhoud van de maatregelpakketten

Het verzoek van de motie Slob-Geurts betreft drie visserijmaatregelpakketten voor drie Natura 2000-gebieden op de Noordzee: de Doggersbank, de Klaverbank en het Friese Front. Hieronder vat ik eerst per gebied de voorgenomen maatregelpakketten samen¹. Ik zal daarbij eerst de maatregelen voor de Doggersbank en de Klaverbank weergeven. Daarna volgt het Friese Front. De voorgestelde maatregelen voor de Doggersbank zijn tot stand gekomen in overleg tussen Nederland, het VK, Duitsland en Denemarken.

Doggersbank (voor kaart zie appendix 4)

De Doggersbank is een grensoverschrijdende zandbank. Nederland wijst Natura 2000-gebied Doggersbank aan in kader van de Habitatrichtlijn voor habitattype permanent overstromde zandbanken (H1110). Duitsland en Verenigd Koninkrijk wijzen hun deel van de Doggersbank aan voor ditzelfde habitattype. Deze drie landen werken daarom samen om tot een gecoördineerd maatregelvoorstel te komen voor het grensoverschrijdende gebied. Dit gebeurt overigens op verzoek van de visserijsector, de natuurorganisaties en de Europese Commissie. Alle partijen erkennen dat een gefragmenteerde benadering ongunstig is voor het visserijbedrijfsleven, het

¹ De volledige technische beschrijvingen van de concept maatregelpakketten en bijlagen zijn - gezien de grote omvang van deze documenten - te vinden via <http://www.noordzeeloket.nl/projecten/noordzee-natura-2000/downloads/index.aspx>. Dit bevat onder meer het ICES-advies en de voorstellen van de stakeholders.

ecosysteem en een eenduidig en gelijk speelveld binnen het Gemeenschappelijk Visserijbeleid (GVB). Gezien de belangen van Denemarken en het feit dat ook dit land een deel van de Doggersbank op zijn gebied heeft is ook Denemarken uitgenodigd om deel te nemen aan de Doggersbank Stuurgroep.

De hele Doggersbank is habitatype H1110, waarvan alle drie de lidstaten hebben vastgesteld dat het in ongunstige staat verkeert. Bodemberoerende visserij heeft negatieve effecten op dit habitatype. Het voorstel is om niet het gehele habitatype van bodemberoerende visserij te vrijwaren, maar om dat in één derde van het gebied te doen. Aan de basis van dit voorstel liggen voorstellen van de visserijsector (met een voorgestelde sluiting van 22%) en van de natuurorganisaties (met een voorgestelde sluiting van 45%), en literatuurstudies van ICES. Het wetenschappelijk advies van ICES luidt dat de beoogde gebiedssluiting van ongeveer 33% waarschijnlijk groot genoeg is om levensvatbare populaties van de karakteristieke soortgemeenschappen te realiseren. De sluiting betreft boomkorvisserij, bordenvisserij, dreggen en semi-pelagische visserij. De partijen in de Doggersbank Stuurgroep konden geen overeenstemming bereiken over de vraag of ook de zegenvisserij uit het gebied moest worden geweerd. Ook ICES kon geen eenduidig advies geven over de noodzaak om ook zegenvisserij uit te sluiten. Deze vorm van bodemberoerende visserij vindt momenteel met een zeer lage intensiteit plaats. Mede op basis van het advies van ICES uit 2012, voorziet het voorstel in de instelling van een (internationaal afgestemd) monitoringsprogramma en in een evaluatie na zes jaar om de maatregelen bij te kunnen stellen.

Net als voor de Klaverbank (zie hierna) voorziet het maatregelpakket voor de Doggersbank in een controle- en handhavingsstrategie, die is gebaseerd op gedetailleerde registratie van posities van vissersschepen en gebruik van het vistuig.

Tenslotte voorziet ook dit pakket in een procedure, waarlangs nieuwe innovatieve vistuigen toegang kunnen krijgen tot het gesloten gebied, mits in een wetenschappelijke beoordelingsprocedure is aangetoond dat dit de instandhoudingsdoelstelling niet in gevaar brengt.

Klaverbank (voor kaart zie appendix 5)

Natura 2000-gebied Klaverbank wijs ik in kader van de Habitatrichtlijn aan voor habitatype riffen van open zee (H1170). Bodemberoerende visserij heeft negatieve effecten op dit habitatype, dat in ongunstige staat verkeert. Ter bescherming van driedimensionale structuren moet beroering van de stenen, keien en grind van dit habitatype worden voorkomen. Hierdoor kunnen de bijbehorende begroeiing (zoals zacht koraal), bijbehorende vissoorten en bodemdieren zich vestigen en handhaven. De voorgestelde maatregel is daarom gericht op het weren van alle vormen van bodemberoerende visserij, zij het alleen in dat deel van het gebied Klaverbank waar het habitatype dominant aanwezig is (ongeveer de helft van het gebied). De rest van het gebied, inclusief de economisch belangrijke Botney Cut, zal toegankelijk blijven voor bodemberoerende visserij. Op deze manier en gebaseerd op de best beschikbare kennis, van zowel vissers als van onderzoeksinstituten als TNO, NIOZ en Imares, is het gebied gezoneerd.

ICES is om wetenschappelijk advies gevraagd over het conceptvoorstel. ICES steunde de ontwerpmaatregelen voor de Klaverbank met uitzondering van de voorgestelde beperkingen in de Botney Cut. In dit conceptvoorstel werden ook beperkingen aan visserij in de Botney Cut voorgesteld. Dit is een voor de visserij een belangrijk gebied. De Botney Cut bevat geen habitatype H1170, maar visserij in de Botney Cut zou wel modderpluimen met een negatief effect op het habitatype kunnen genereren. In navolging van dit wetenschappelijk advies zal ik daarom de Botney Cut voor de visserij toegankelijk te houden.

Het maatregelpakket voorziet verder in een controle- en handhavingsstrategie. Deze is gebaseerd op gedetailleerde registratie van zowel posities van vissersschepen als gebruik van het vistuig. Tot slot voorziet het pakket in een procedure, waarlangs nieuwe, innovatieve vistuigen toegang kunnen krijgen tot het gesloten gebied. Voorwaarde is, dat in een wetenschappelijke beoordelingsprocedure is aangetoond dat dit de instandhoudingsdoelstelling niet in gevaar brengt.

Friese Front (voor kaart zie appendix 6)

Natura 2000 gebied Friese Front zal ik in kader van de Vogelrichtlijn aanwijzen voor de zeezoet. Het visserijmaatregelpakket is bedoeld om het risico van bijvangst van (naar vis duikende) zeezoeten in stand want netten weg te nemen. Daarom wordt voorgesteld in het gebied van juni tot en met november een verbod in te stellen op visserij met stand want, in verband met de

aanwezigheid van zeekoeten in het gebied in die periode. Het voorstel betreft geen enkele andere vorm van visserij.

Er is wetenschappelijk advies gevraagd van ICES²; ICES ondersteunt het voorstel.

Oordeel over de maatregelpakketten

Tegen de achtergrond van bovenstaande inhoudelijke beschrijving van de maatregelen en het proces waarmee deze tot stand zijn gekomen is mijn oordeel positief over proces en inhoud, mede in het licht van motie 32 van Kamerleden Slob en Geurts. Mijn oordeel is dat de maatregelvoorstellen zoals zij er liggen aan de verzoeken van de motie Slob-Geurts (TK 32002, nr. 32) voldoen.

Motie Slob-Geurts TK 32002, nr. 32:

"Verzoekt de regering bij het opstellen van de maatregelpakketten voor natuurgebieden op zee te overleggen met de visserijorganisaties, hierbij te streven naar instemming en draagvlak bij de visserijorganisaties en nadrukkelijk een afweging te maken tussen het vereiste niveau van gebiedsbescherming en de economische impact en proportionaliteit van de maatregelpakketten."

Zoals aangegeven is er sinds 2009, transparant en constructief overlegd met de visserijorganisaties en de andere in de motie genoemde belanghebbenden (natuurorganisaties en wetenschap). Er is daarbij gestreefd naar instemming en draagvlak bij alle belanghebbenden, ook bij de visserijorganisaties.

Als onderdeel van het proces hebben intensieve onderhandelingen tussen alle partijen plaatsgevonden. De visserij- en natuurorganisaties hebben zelfs nog de gelegenheid gekregen van de landen in de Doggersbank Stuurgroep om met elkaar een compromis te ontwikkelen onder leiding van een onafhankelijke externe voorzitter. Helaas heeft dit niet tot overeenstemming heeft geleid.

Daarom hebben de betrokken overheden besloten om uiteindelijk hun verantwoordelijkheid te nemen voor een wetenschappelijke onderbouwde compromis, vanwege de op hen rustende juridische verplichtingen. Dit geldt ook voor Nederland. In de ontwikkeling daarvan is tot mijn spijt geen volledige instemming van de visserijsector verkregen omdat de verschillen in posities tussen die van de visserijsector enerzijds en die van de landen anderzijds onoverbrugbaar blijken. Er is echter door alle partijen vol overtuiging naar gestreefd en de input van die partijen is in mijn voorstel gebruikt. Er is bovendien internationale overeenstemming met de andere lidstaten bereikt.

Ik heb nadrukkelijk de voorstellen van zowel sector als natuurorganisaties gewogen. Zo is de keuze gemaakt om slechts één derde van het gebied Doggersbank te sluiten voor delen van de visserij, en om dus twee derden van het gebied 'open' te laten. Dit is mede gebaseerd op het eerste voorstel van de sector (met een dekkingpercentage van 22%) en ngo's (met een dekkingpercentage van 45%).

Ik heb goede reden om aan te nemen dat het toestaan van visserij in ca. 2/3^e van het gebied geen onevenredige schade toebrengt aan dit Natura 2000 gebied. Dit is mede gebaseerd op het ICES advies dat een sluiting van ca. 1/3^e voldoende moet zijn in gebied in essentie te beschermen. Dit is ook mede gebaseerd op het feit dat ook van de EC geen geluiden zijn vernomen dat toegang voor de visserij tot 2/3^e van het gebied niet acceptabel zou zijn. Hoewel de natuurbeschermingsorganisaties zich zeer kritisch hebben getoond met een veel geringere sluiting dan zij voorstaan, ben ik van oordeel dat het huidige voorstel verdedigbaar is. Ter vergelijking: in de kustzone is voor hetzelfde habitattypen op basis van het VIBEG akkoord tussen rijk, visserij- en natuurorganisaties en de bijbehorende Passende Beoordeling een volledige sluiting voor zware bodemberoerende visserij per 2016 afgesproken. Ook zijn alle drie de maatregelvoorstellen alleen gericht op vormen van visserij die uit hoofde van de instandhoudingsdoelen problematisch zijn. Andere vormen van visserij blijven ongemoeid.

Economische impact

² ICES: International Council for the Exploration of the Sea

Als gevolg van deze voorstellen behoeven geen inkomsten verloren te gaan. Immers, TACs, Quota's en contingenten blijven door de voorstellen onaangetast; vissers houden dezelfde visrechten. Een indruk van de economische impact van de maatregelen laat zich op basis van verschillende rapporten³ grofweg duiden. Hoewel over de details van dergelijke berekeningen altijd discussies mogelijk zijn biedt het LEI toch de best beschikbare kennis op grond waarvan ik besluiten kan nemen en voorstellen kan doen. Op basis van deze rapporten blijkt dat de bruto toegevoegde waarde die wordt gegenereerd in de gebieden die met deze maatregelen worden gesloten, op niveau van de Nederlandse kottervloot, gering is. Het gaat in de Nederlandse offshore Natura 2000-gebieden om ongeveer een half procent van de bruto toegevoegde waarde van de Nederlandse kottervloot op platvis. Dit is, zeker in vergelijking met variaties in visserijquota en prijschommelingen van brandstof, zeer beperkt. Dit laat onverlet dat ik zeer goed begrijp dat deze maatregelen wel stapelen op andere maatregelen en gebieden. Ook zie ik dat de maatregelen neer kunnen slaan op individuele bedrijven, die op zoek moeten naar alternatieve visbestekken. Toch acht ik dat noodzakelijk voor het realiseren van de Natura 2000-doelen in de betreffende gebieden. Ik heb niet alleen gezocht naar draagvlak bij de visserijorganisaties, maar ook bij de buurlanden, de natuurorganisaties en de Europese Commissie.

"Verzoekt de regering, bij gelijk resultaat voor natuur in de maatregelpakketten, te kiezen voor een variant met de minste economische schade."

Dit is expliciet het uitgangspunt geweest in het eerder beschreven proces. Bij de Klaverbank worden alleen de gebieden gesloten waren het te beschermen habitatype dominant aanwezig is. De zonerings van de Doggersbank is gebaseerd op een methode waar, binnen de randvoorwaarden van natuur⁴, de gebieden zijn geselecteerd die de minste kosten voor de sector met zich meebrengen. Deze systematiek houdt in dat de Doggersbank is opgedeeld in kleine vierkante onderdelen met een oppervlak van 17,7 km². Van elk vierkant is door ICES berekend wat de opbrengst is geweest. Vervolgens zijn die gebieden gelegd op de natuurwaarden. Daarna is er de keuze gemaakt om binnen de gestelde natuurbeschermingsrandvoorwaarden de gebieden te kiezen waar de minste opbrengst werd gerealiseerd uit de visserij. Bij het betrekken van de voorstellen van sector en NGO's is weer eerst gekeken naar de vlakken die de minste opbrengst hadden en deze zijn vervolgens geïntegreerd in de gezoneerde gebieden.

Ook hieruit blijkt dat de partijen alle mogelijke moeite hebben gedaan om de last voor de visserijsector maximaal te beperken. Bij dit alles is zorgvuldig gekeken dat er geen strijdigheid ontstaat met de Europese regels voor bescherming van de natuur, vooral waar deze stellen dat de keuze van gebieden gebaseerd moet zijn op de natuurwaarden. Dit is in overeenstemming met de motie. Daarnaast hebben ook beleidsoverwegingen meegespeeld, zoals synergie met windmolenparken en de Duitse wens om 50% van haar deel van de Doggersbank te sluiten.

"Verzoekt de regering het alternatieve voorstel van de visserijsector voor de Doggersbank serieus te betrekken bij het opstellen van het maatregelpakket voor dit gebied."

Het alternatieve voorstel van de visserijsector is serieus betrokken bij de ontwikkeling van het voorstel. Sterker, het kaartbeeld van de sector is uitgangspunt in de ontwikkelmethode van het uiteindelijke voorstel. Dit bleek echter niet voldoende, omdat het sectorvoorstel onvoldoende tegemoet kwam aan andere uitgangspunten en overwegingen, zoals die van de natuurorganisaties en de buurlanden. Ook stelt de Europese Commissie strikte eisen aan de onderbouwing van de maatregel in relatie tot de Natura 2000-doelstellingen (relatie visserijdruk en staat van het habitatype). In het alternatieve voorstel van de sector wordt o.a. uitgegaan van een veel grotere openstelling van het Duitse deel van de Doggersbank dan de Duitsers zelf wenselijk achtten. Mede naar aanleiding van de genoemde motie van de leden Slob en Geurts is bij de Duitsers aandacht gevraagd voor de bezwaren van het Nederlandse visserijbedrijfsleven tegen de gewenste 50% sluiting. Dat heeft geleid tot vele ambtelijke contacten. Uiteindelijk heb ik in juni 2013 persoonlijk

³ Gebaseerd op LEI rapporten van Van Oostenbrugge *et al.* (2010), Hamon *et al.* (2013) en Bartelings *et al.* (2013), welke u ook kunt vinden op de website <http://www.noordzeeloket.nl/projecten/noordzee-natura-2000/downloads/index.aspx>.

⁴ Bijvoorbeeld: voldoende dekking van alle onderscheiden bodemgemeenschappen, inclusief concentraties van zeldzame soorten aangezien die volgens het ICES-advies bijdragen aan een snellere realisatie van de doelen.

aan mijn Duitse collegae voor natuur en visserij gevraagd om toch het gesprek aan te gaan met de Nederlandse visserijsector. Een dergelijk gesprek heeft inderdaad plaatsgevonden, maar zonder resultaat. Mijn Duitse collega heeft mij daarna bericht dat deze zich wenst te houden aan de afspraken die gemaakt zijn in de Doggersbank Stuurgroep en dat men niet wil afwijken van de interne afspraken om ca. de helft van het Duitse deel van de Doggersbank te sluiten. Het is dus niet gelukt om de Duitse overheid en het Nederlandse visserijbedrijfsleven tot elkaar te laten komen. Ondanks mijn inspanningen en die van mijn ambtenaren kon niet worden tegemoet gekomen aan de wensen en verlangens van de visserijsector.

"Verzoekt de regering zo spoedig mogelijk een nulmeting te doen en indicatoren vast te stellen en de resultaten van de maatregelen in natuurgebieden op zee te monitoren, waarbij het sluiten van gebieden ook teruggedraaid kan worden."

Mede op basis van het advies van ICES, gaan de voorstellen op dit punt in. Zo voorzien de voorstellen in de instelling van een (voor Doggersbank internationaal afgestemd) monitoringsprogramma en in een evaluatie na zes jaar om de maatregelen bij te kunnen stellen. Dit kan betekenen dat de maatregelen op hetzelfde niveau blijven, worden uitgebreid, worden verminderd of worden teruggedraaid.

Op 11 juli jl. is door de Ministerraad deel 2 van de Mariene Strategie vastgesteld. Hierin is de mariene monitoring, aanleverend voor onder andere Kaderrichtlijn Mariene Strategie en Vogel- en Habitatrichtlijn/ Natura 2000, geregeld. De nulmeting van de toestand van de mariene Natura 2000-gebieden is voorzien voor voorjaar en zomer 2015.

"Verzoekt de regering bij het opstellen van de maatregelpakketten voor natuurgebieden op zee ruimte te bieden voor maatwerk zoals het inzetten nieuwe vistechnieken als alternatief voor het volledig sluiten van gebieden voor visserij."

Ook dit punt wordt geadresseerd in de voorstellen. Zo voorzien de voorstellen voor Doggersbank en Klaverbank in een procedure waarbij innovatieve nieuwe vistuigen toegang kunnen krijgen tot de gesloten gebieden. Voorwaarde is een wetenschappelijke beoordelingsprocedure waarin is aangetoond dat dit de instandhoudingsdoelstelling niet in gevaar brengt.

Verdere proces

Ik heb hierboven uiteengezet hoe het proces om te komen tot evenwichtige visserijmaatregelen heeft plaatsgevonden. Ook heb ik aangegeven dat ik alle mogelijke moeite die binnen mijn bereik ligt, heb gedaan om bij de sector draagvlak te verkrijgen. Bovendien heb ik mij ingezet om ook bij mijn Duitse collega begrip te vragen voor de wensen van de sector. Ik ben er dan ook van overtuigd dat de voorstellen proportioneel zijn en dat ik gehandeld heb in overeenstemming met met de verzoeken van motie 32 van de leden Slob en Geurts. De voorstellen zijn gebaseerd op wetenschappelijk advies en ze zijn in een zorgvuldig proces tot stand gekomen.

Gelet op de afspraken met de andere lidstaten ben ik voornemens de voorstellen verder af te laten stemmen met de derde landen die een visserijbelang hebben op de Doggersbank om te komen tot een gezamenlijke aanbeveling. Dit is een verplichting uit het Gemeenschappelijk Visserijbeleid van de EU (zie art. 11 lid 3 van Vo. 1380/2013⁵). Het resultaat van die afstemming zal ik in de Scheveningengroep voorleggen. Voor de Doggersbank is dat gezamenlijk met het Verenigd Koninkrijk, Duitsland en Denemarken. Ik heb het belang van samen optrekken al eerder benadrukt, zowel voor de visserij als voor de natuur.

In de Scheveningengroep zal de zgn. 'gezamenlijke aanbeveling' worden besloten. Deze gezamenlijke aanbeveling wordt ingediend bij de Europese Commissie, die vervolgens, met inachtneming van de beschikbare wetenschappelijke adviezen, binnen drie maanden na ontvangst de maatregelen vaststelt. Volgens de verordening zal de EC het concept-besluit voorleggen aan Raad en Europees Parlement gedurende een periode van 2 maanden met een mogelijke verlenging

5 VERORDENING (EU) Nr. 1380/2013 VAN HET EUROPEES PARLEMENT EN DE RAAD | van 11 december 2013 | inzake het gemeenschappelijk visserijbeleid, tot wijziging van Verordeningen (EG) nr. 1954/2003 en (EG) nr. 1224/2009 van de Raad en tot intrekking van Verordeningen (EG) nr. 2371/2002 en (EG) nr. 639/2004 van de Raad en Besluit 2004/585/EG van de Raad | (PB L 354, 28.12.2013, p.22)

van 1 maand. Indien Raad en EP niet meer reageren kan het EU besluit worden genomen door de EC.

Uw Kamer blijft uiteraard betrokken bij de verdere ontwikkeling van deze voorstellen, omdat het hier GVB-maatregelen betreft. Via de reguliere voorbereiding van de Visserijraad met de Kamer houdt u dan zicht op de verdere ontwikkeling.

Appendices bij de bijlage bij de brief aan de Tweede Kamer betreffende de Bescherming van offshore Natura 2000 gebieden in de Noordzee en start aanwijzingsprocedure mariene Natura 2000-gebieden Moties Slob-Geurts (Kamerstuk 32002 nr. 32 en nr. 33)

Appendix 1 Wetenschappelijke adviezen ICES

Appendix 2 Processtappen

Appendix 3 Kaart overzicht Natura 2000 gebieden Nederlandse Noordzee

Appendix 4 Kaart gezoneerd Doggersbank

Appendix 5 Kaart gezoneerd Klaverbank

Appendix 6 Kaart Friese Front

6.3.3.7

ECOREGION North Sea
 SUBJECT Proposed fisheries measures for the Cleaver Bank Special Area of Conservation

Advice summary¹

ICES supports the proposal to close the area dominated with habitat type H1170 to mobile bottom-contacting fishing gear as this will contribute to achieving the conservation objects set for the Cleaver Bank.

ICES does not support the immediate ban on beam trawling in the Botney Cut as the level of beam trawling is very low and not likely to be impeding progress in achieving the conservation objectives. Further studies are needed to establish if fishing with mobile bottom-contacting fishing gear in the Botney Cut affects the adjacent reef habitat.

ICES considers the conclusion of the FIMPAS workshop to not develop site-specific measures for mammal conservation objectives for the Cleaver Bank to be appropriate.

ICES notes that for most benthic species the Cleaver Bank is an open system and recovery processes are likely to be significantly influenced by the broader ecosystem outside of the proposed closed area. Some of the typical reef species will not have commenced or completed re-colonization within the six-year period.

It is imperative that an operational framework be built around the stated conservation objectives. The establishment of a monitoring programme and selection of indicators will require further work. Indicators that are responsive to changes in pressures from the implementation of the fisheries measures and can measure trajectories towards the stated conservation objectives should be selected. It will be necessary to establish the spatial and temporal variance and patchiness of the characteristics being measured by the indicators.

Request

Given the conservation objectives for H1170, ICES is requested to advise on the degree to which the implementation of the proposed fisheries measures² will progress the Cleaver Bank SAC towards the achievement of the Conservation Objectives.

In preparing its response ICES is required to advise on the changes that can be attributed solely or primarily to the implementation of these proposed fisheries measures from the FIMPAS project.

Specifically, for the proposed fisheries measures Cleaver bank SAC, ICES is invited to describe:

- i) the likely progress over a six year period towards achieving the conservation objectives that will occur as a result of implementation of the proposed measures in Cleaver Bank area;*
- ii) the likely long term progress towards achieving the conservation objectives that will occur beyond the six year period as a result of implementation of the proposed measures in Cleaver Bank area;*
- iii) how progress towards achieving the conservation objectives could be measured and when such changes can be expected to be measurable*
- iv) the key aspects that should be contained in an appropriate, cost effective, monitoring programme to measure progress towards achieving the conservation objectives;*
- v) The effort displacement within the SAC attributable to the proposed measures and the expected effects of such displacement on the achievement of the Conservation Objectives, together with any possible measures to mitigate any effects. When considering effort displacement other relevant factors causing*

¹ This ICES advice is in response to specific questions on fisheries measures proposed by the Netherlands. Unless specifically stated, it is not an opinion from ICES on the designation of Natura 2000 sites or the Conservation Objectives set by the Member State. ICES facilitated input and advice in the FIMPAS process by identifying an expert who advised the process. This expert was not involved in any of the ICES review, drafting or advice approving processes. An ACOM Vice-Chair was assigned the task of following and observing the process. Expert reviewers and advice drafters were selected from independent countries as per ACOM procedures. The ICES advice drafting process was managed by the ACOM Vice-Chair; the scientific advice is the work of the independent reviewers and advice drafters.

² The proposed fisheries measures as submitted to ICES by the Netherlands are shown in Annex 1.

changes in fishing patterns in the Cleaver Bank (e.g. TAC/quotas, fuel cost, other spatial claims etc.) should be taken into account;

- vi) any shortcomings in the proposed measures and how these might be overcome*
- vii) any other information ICES considers relevant for the achievement of conservation objectives in the Cleaver Bank SAC for Habitat H1170*
- viii) Invites ICES to comment whether the presented information on the occurrence and distribution of Habitat type H1170 justifies a change of the Southern and Northern boundaries for the Cleaver Bank proposed SAC, as described in the Cleaver Bank zoning proposal?*
- ix) Invites ICES to comment on the use of the available data from different sources (fishermen charts, sediment charts, expert reviews) to determine the demarcation of the Habitat type H1170, in the FIMPAS Steering Group Cleaver Bank zoning proposal*

Regarding the Conservation Objectives for Harbour Porpoise, Grey Seal and Harbour Seal

- xi) Invites ICES to comment on the outcome of the FIMPAS workshop not to develop site specific measures for mammal conservation objectives for Cleaver Bank SAC.*

ICES advice

According to the documentation submitted to ICES together with the request, the proposed fisheries measures for the Cleaver Bank attempt

" to combine the knowledge of the fishing industry with the available scientific knowledge in an ecosystem based approach, incorporating the precautionary principle and using best available technology to develop a more focused and proportional fisheries measure to achieve the Cleaver Banks conservation objectives..... It should result in maintaining an adequate connectivity between areas containing habitat type 1170, while facilitating traditional fishing activities in areas where this habitat type does not appear to exist."

In order to put the request and the ICES response into context, the Conservation Objectives for the Cleaver Bank are available in Annex 2.

The main impact on the open-sea reefs of the Cleaver Bank is likely to come from fisheries (beam and otter trawling gear, gillnets), of which trawling has the biggest impact (see Annex 3). The metal shoes, tickler chains, ground rope, and net of the beam trawl dig into or slide along the seafloor, causing physical damage along its way by breaking or dislodging sessile plants and animals. The boards of the otter trawl may also dig into the surface of the seafloor in the case of soft sediments and sand or grind hard surfaces like rocks and stones. The floats and the weighted bobbins attached to the rope running along the lower mouth of the trawl may also slide along the seafloor and abrade the species growing on top of the reef.

The fisheries measures proposed for the Cleaver Bank Special Area of Conservation (SAC) envisage three different fisheries regimes for three zones, as shown in Annex 1. These are: (a) exclusion of beam trawling in the Botney Cut (but with otter trawling permitted); (b) no beam or otter trawling in the two predominately reef habitat areas; and (c) no restrictions in three predominately sandy areas. In responding to the request, ICES provides a separate response for these three different zones where appropriate.

ICES notes that the small size of the area proposed for conservation of open-sea reef habitats on Cleaver Bank suggests that for most of the benthic species it is an open system. Recovery processes that occur within it are therefore likely to be significantly influenced by the broader ecosystem outside of the proposed closed area. Harbour seals and grey seals, along with other marine mammals are transients and are not expected to be affected by the proposed management measures.

Response to Question i) the likely progress over a six-year period

The conservation objective is to improve the quality of the reefs. Good quality is characterized by the presence of sessile biotic communities of long-lived species. If the indicator of good quality is merely the presence of long-lived species on the reefs, these species appear to be present now and will therefore continue to be present over the first six-year period of reduced fishing pressure.

Based on studies undertaken in the early 1990s on the impacts of gravel extraction, recovery of most species is relatively fast, that is within ten years. If fishing has impacted the species on the reef, it is likely that changes will be observed in the impacted areas on similar time scales.

However, with the history of heavy beam trawling in the area dating back to the late 1970s and evidence of moving and chipping of boulders and churning of gravel beds, it is likely that most of the longer-lived species are not present in their natural abundance and population age/size structure. Of the typical animal species known to live on the reefs, the ocean quahog (*Arctica islandica*) is the longest lived with a lifespan in the order of centuries. There is speculation that the horse mussel (*Modiolus modiolus*) may also be present. This species has a long lifespan (50–100 years) with generation times of about six to ten years, and is known to have irregular recruitment and a very long pelagic larval dispersal stage. For a small area such as Cleaver Bank, recruitment of *M. modiolus* will likely depend upon sources from outside of the protected area. The encrusting coralline algae species found on the reefs, *Lithothamnion sonderi* and *Phymatolithon* sp., are slow growing (millimeters per year) and under certain conditions can form maërl. Maërl beds can build up over millennia and it is difficult to know whether or not this type of biogenic habitat could form on Cleaver Bank in the absence of fishing pressure. *L. sonderi* is only known to produce maërl in Scottish waters. These species are not likely to show measurable change over a six-year period and specialized monitoring programmes would be required to determine their status.

Response to Question ii) the likely long-term progress

For the reef habitat it is likely that some of the typical reef species will not have commenced or completed re-colonization within the six-year period (see discussion above for long-lived species). Recovery of habitat-forming species of the reef could take a considerable length of time and will continue for decades. A well-designed baseline study and monitoring programme will be needed to measure changes.

As an open system, changes in fish community composition occurring at large spatial scales throughout the North Sea will influence progress towards achieving conservation objectives in the Cleaver Bank. This is because many fish species prey on benthic species at some point in their life cycle and changes to the predation pressure may influence recovery trajectories of the benthos.

Environmental changes are also expected to be expressed over these longer time periods (including both predictable cycles such as the NAO as well as climate change) and will affect conservation objectives in unknown ways (new species moving in, flood waters inducing changes in water chemistry and pelagic production, etc.). Environmental change will influence rates of changes as well as changes in state. However, in general, the fisheries management measures suggested will contribute to reduce the pressure on the benthic habitat from bottom-contacting fishing gears, although the scale of this effect and consequences to the status of the habitats are not possible to predict.

Response to Question iii) how progress could be measured and changes can be expected to be measurable

It is imperative that an operational framework be built around the stated conservation objectives. This will entail establishment of appropriate indicators, allowing for target setting and evaluation followed by an appropriate monitoring programme (see below). Ongoing work by the ICES expert group on Ecosystem Effects of Fishing Activities (WGECO) has outlined a prioritized list of eighteen criteria that should be considered when selecting indicators (ICES, 2012a). Evaluation of indicators against these criteria considers the quality of the available data, responsiveness of the indicator to the pressure of interest, and links to conceptual and/or theoretical underpinnings. Not all of these criteria are expected to be met by any one indicator and not all may be relevant to the present application. Table 6.3.3.7.1 provides an overview of a preliminary list of generic criteria for indicators along with an evaluation of their priority for any monitoring programme. Indicator redundancy, that is groups of metrics or indicators which co-vary significantly, providing duplicate copies of a single signal rather than reflecting different independent signals, should be avoided.

Table 6.3.3.7.1 Preliminary list of priority for criteria by which the suitability of indicators may be assessed (ICES, 2012a).

Number	Criterion/Characteristic	Priority
1	Methodological approach to defining the target should be consolidated	Essential
2	Existing reference conditions	Essential
3	Relevant spatial domain	Desirable
4	Environmental fluctuations and climate	Desirable
5	Related to change in specific pressures	Essential
6	Uncertainty	Desirable
7	Relevant to management objectives	Essential
8	Relevant to management measures	Essential
9	Comprehensible	Desirable
10	Established target	Desirable
11	Pragmatic	Desirable
12	Theoretically sound	Essential
13	Early warning	?
14	Target suites	Desirable
15	Compatibility	Desirable
16	State, impact, pressure, and operational targets	Essential
17	Relevance to MSFD ecosystem components	Essential
18	Cross-application	?

Consideration of the relative importance of the indicators when assessing overall status may be required and will relate back to relative importance of the conservation objectives.

Response to Question iv) *...an appropriate, cost effective, monitoring programme...*

Establishing a comprehensive baseline study is a priority and this should be informed by previous work on the Cleaver Bank. This is a prerequisite to designing a monitoring programme to measure progress or otherwise towards the conservation objectives. Suitable control areas should be selected, outside of the closed area where normal fishing operations are conducted. The spatial and temporal variance and patchiness of the species or ecological elements to be monitored needs to be understood and addressed in the design of a monitoring programme. Standard power curve analyses can be used to determine the precision needed to detect a difference of a given size (say a 25% increase in abundance of a population) with a specified (usually high) probability. To determine the sampling effort needed to achieve the necessary level of precision, it is then necessary to know how variance in the population estimate increases with sampling effort. For the overall objectives of improved environmental status for the communities, improvements in the more common species will contribute most to healthy functioning of ecosystem processes. Such improvements are usually best measured with a representative, spatially stratified random survey design. However, for objectives related to specifically improving the status of rarer species, particularly ones with specialized ecological requirements, targeted sampling will be more efficient. For rarer species, accurate estimates of likelihood of encounter and total range of occurrence are properties that are possible to quantify with sufficient precision to allow evaluation of trends over time.

Use of established protocols for related subjects (e.g., wind farm EIA (environmental impact assessment), or oil-spill monitoring) should be considered. Standards such as EN 16260:2012 (CEN, 2012) on visual seabed surveys and ISO 16665:2005 (ISO, 2005) on sampling marine soft-bottom macrofauna could inform this process.

The monitoring requirements of the Marine Strategy Framework Directive and developments within OSPAR will provide opportunities for incorporation of monitoring requirements into a wider monitoring programme. Currently, the ridged structure and focus on fish stock assessment of Data Collection Framework (DCF) surveys means that they could provide only limited data and information for the likely monitoring requirements on the Cleaver Bank. With minimal adjustments, DCF surveys could provide useful data on both commercial species and benthic elements.

It will be appropriate to target monitoring effort in areas which are judged to be controversial and/or sensitive, for example areas where moderate to high fishing effort has occurred prior to the closure, and across the interface between open and closed areas. Cooperation with the fishing industry could bring efficiencies and provide cost-effective access to the sites.

There are a variety of sampling and data collection methods available such as high-frequency ecograms combined with sidescan sonar, underwater video, remotely operated vehicles (ROV), bait-camera systems, grab sampling and dredge sampling, and it is likely that a combination of these and other methods will be required.

Response to Question v) *The effort displacement within the SAC*

Except for otter board trawling in the Botney Cut, fishing activity using moving bottom-contacting gear appears to be limited on the Cleaver Bank. Therefore, based on the current level of fishing effort, effort displacement will not be an issue of concern.

Response to Question vi) *any shortcomings in the proposed measures....*

Green area – Low impact zone: the Botney Cut, in which beam trawling is banned but otter board trawling is allowed.

Otter trawling in the Botney Cut is evidenced from the report of the FIMPAS Workshop 2. During such fishing activity in the muddy seabed of the Botney Cut it is likely that a mud sediment plume is generated. It is unclear if this plume will result in mud settling on the adjacent reef on either side of the Cut and, if this does occur, the spatial extent of such settling. It is also unclear what effect this would have on the reef.

Information provided in FIMPAS Workshop 2 suggests that there is limited beam trawling in the Botney Cut. Beam trawling in a mud area such as the Botney Cut would produce a greater mud plume than otter trawling and would, as such, result in greater potential pressure to adjacent reef habitats.

Given the higher potential pressure from beam trawling compared to otter trawling on the reefs adjacent to the Botney Cut, ICES understands the inclination to apply the precautionary approach and to ban beam trawling in the Cut. However, as the level of beam trawling effort is very low it is unlikely that a ban on beam trawling, at its current level, will have a significant influence on achieving the conservation objectives set for the Cleaver Bank. Based on concerns with evoking the precautionary approach to ban an activity that currently is not likely to be contributing in any real sense to not achieving the conservation objectives, ICES does not support the immediate ban on beam trawling in the Botney Cut.

With regard to both otter and beam trawling, ICES advises that monitoring, supported by sediment transportation modelling, should be undertaken to verify that fishing with mobile bottom-contacting gear does not cause re-suspended mud settling on and impacting the adjacent reefs. In the event that the risk to the reefs is established from re-suspended mud relating to fisheries activities, mitigation measures should be considered and investigated. These could include seasonal and/or tidal restrictions and closed buffer zones at either side of the Botney Cut to remove or reduce the pressure on the adjacent reef.

Brown area – No mobile bottom-contacting gear fishing zone

This zone contains the reef habitat for which the Cleaver Bank is protected. The documentation provided shows that this part of the Cleaver Bank is bottom trawled throughout the year, but fishing effort is low. ICES has previously advised (ICES, 2009) that typical species of reef habitats are generally more vulnerable to impact from bottom-contacting fishing gear than those of sandbanks. Heavy bottom trawls can destroy the physical structure of reefs.

In 2009 ICES pointed out that:

- the first and second passes of a mobile, bottom-contacting fishing gear exert the most severe effect on benthic structures, communities, and species. It is likely that the reef areas with the highest potential to recover soonest to favourable conservation status are those areas with the lowest historical and current bottom trawling activity. It is also likely that areas that are trawled more than 4–5 times a year do not support self-sustaining populations of some of the characteristic benthic species most vulnerable to mobile, bottom-contacting fishing gears, particularly for reef communities.
- For protected reefs in areas frequently exposed to mobile, bottom-contacting fishing gears, complete closure may be necessary to restore habitats and species to favourable conservation status.

ICES considers these comments to be valid in the case of the Cleaver Bank and supports the proposal to close this area to fishing with mobile bottom-contacting gear.

Response to Question vii) *any other information ... relevant for the achievement of conservation objectives....*

Monitoring of relevant, sensitive, and responsive indicators to follow the progress towards the conservation objectives is needed. Some species will be able to recolonize impacted areas quite fast while others need long(er) time. Monitoring the progress (if any) towards the conservation objectives will probably require adjustment and modification of the monitoring programme and possibly even the fisheries measures put in place.

ICES agrees that the proposed fisheries measures will contribute to the reef achieving its conservation objectives as it removes the main anthropogenic pressure acting on the reef and its communities.

Response to Question viii) ...whether the presented information justifies a change of the Southern and Northern boundaries for the Cleaver Bank proposed SAC?

Based on the information provided, ICES considers the change in the southern and northern boundaries to be reasonable as the new boundaries will increase the target habitat to be protected.

Response to Question ix) ...comment on the use of the available data from different sources

ICES notes that the demarcation of the reef habitat type is largely based on the surficial geology of the area. This is a good proxy for inferring benthic community composition. However, baseline biological data is essential in order to characterize the biota and to determine at the six-year review whether the management plan needs to be adjusted.

Response to Question xi)comment on the outcome of the FIMPAS workshop not to develop site specific measures for mammal conservation objectives.....

ICES has previously advised that harbour porpoise are highly mobile on spatial scales much larger than the Natura 2000 sites that have been proposed in the German EEZ (ICES, 2009). Consistent with the 2009 advice, and without effective management outside Natura 2000 sites, the full protection of marine mammals within the boundaries of the Dutch Natura 2000 sites would not ensure a high likelihood of achieving very low bycatch mortality for marine mammals in the southern North Sea.

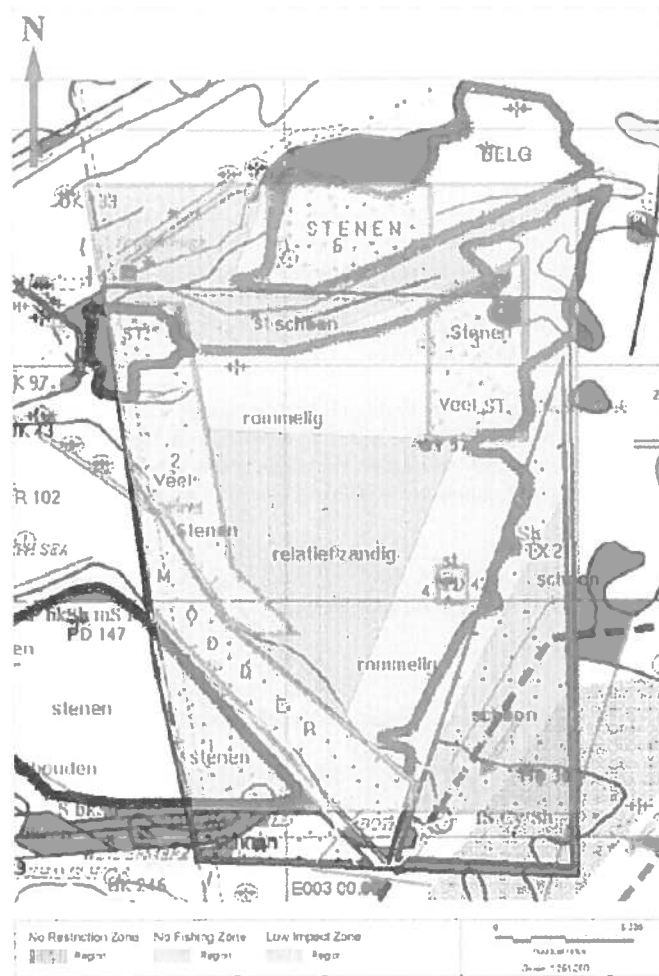
Consequently, ICES considers the conclusion of the FIMPAS workshop to not develop site-specific measures for mammal conservation objectives for Cleaver Bank to be appropriate.

Sources

- CEN. 2012. Water quality – Visual seabed surveys using remotely operated and/or towed observation gear for collection of environmental data. BS EN 16260:2012.
- ICES. 2009. Report of the EMPAS project (Environmentally Sound Fisheries Management in Protected Areas), 2006–2008, an ICES–BfN project. 123 pp.
- ICES. 2010. Report of the FIMPAS Workshop 2: Fishery Impact and Conflicts with Conservation Objectives, 30 June–2 July 2010, Neufchâtel-Hardelot, France. ICES CM 2010/ACOM:53. 45 pp.
- ICES. 2012a. Report of the Working Group on the Ecosystem Effects of Fishing Activities (WGECO), 11–18 April 2012; Copenhagen, Denmark. ICES CM 2012/ACOM:26. 192 pp.
- ICES. 2012b. Material provided to ICES for advice on proposed fisheries measures for Cleaver Bank and the Frisian Front. The FIMPAS project, September 2012. ICES CM 2012/ACOM:76.
- ISO. 2005. Water quality – Guidelines for quantitative sampling and sample processing of marine soft-bottom macrofauna. ISO 16665:2005.

Annex I

Proposed fisheries measures for the Cleaver Bank. From “Request for ICES Advice Cleaver Bank and Frisian Front, FINAL VERSION, 4 Sept. 2012”. The map is from the document “Industrial proposal on gravel content”, submitted to ICES as part of the request.



Proposed fisheries measures in the Cleaver Bank:

- (a) Green – Low impact zone: the Botney Cut, in which beam trawling is banned but otter board trawling is allowed;
- (b) Brown – No [mobile bottom-contacting gear]³ fishing zone: a zone with no bottom-contacting gear fisheries allowed. The zone is located in areas with a dominant presence of habitat H1170;
- (c) Purple – No restriction zone: a zone with no restriction on fisheries located on predominantly sandy areas.

³ This is incorrectly labelled on the map – it is *not* a “No Fishing Zone” but rather a “No mobile bottom-contacting gear fishing zone”. This was confirmed with the Ministry of Agriculture, Nature and Food Quality, the Netherlands.

Conservation objectives for the Cleaver Bank

Detailed conservation objectives: Maintain the surface area and improve quality of reefs.

Explanation: Good quality is characterized by the presence of sessile biotic communities of long-lived species. These communities are attached to the hard substrate. An improvement of the quality can be achieved if the disturbance of hard compact substrates and their biotic communities is prevented, i.e. firmly touched or their position changed.

CONSERVATION OBJECTIVES	Fishing gear				
	Beam trawl	Otter trawl	Demersal seine nets	Gillnets	Midwater trawl
Habitats					
Dogger Bank H1110_C Sandbanks	High with disagreement	Medium	Low	Low	Not Relevant
Cleaver Bank H1170 Open-sea reefs	High	High	Low	Low	Not Relevant
Marine mammals					
Harbour porpoise	Low	Low	Low	Medium	Low
Harbour seal	Low	Low	Low	Low	Low
Grey seal	Low	Low	Low	Low	Low
Seabirds					
Great skua	Low	Low	Low	Low	Low
Great black-backed gull	Low	Low	Low	Low	Low
Common guillemot	Medium	Medium	Medium	High	Low
Lesser black-backed gull	Low	Low	Low	Low	Low

Gear Impact Matrix FIMPAS WS

High: direct disturbance, the continuity of the habitat/species is in danger.

Medium: the effect is visible and the conservation status will not remain the same without any measures.

Low: the habitat/species is affected, however the conservation status of the habitat/species is supposed to remain.

The judgement based on majority opinions. In most cells particularly for the Dogger Bank area there were a range of opinions; often industry stakeholders rated the impact lower than scientists and NGO's.

ECOREGION North Sea
SUBJECT Proposed fisheries measures for the Frisian Front Special Area of Conservation

Advice summary¹

ICES considers the proposed ban of gillnet fishing in the Frisian Front to be precautionary. However, given the potential risk to the common guillemot from gillnets and the potential for future changes in fishing patterns for the reasons discussed below, ICES agrees with the proposed measures. Notwithstanding this view in this specific situation, ICES has concerns with evoking the precautionary approach to ban activities that currently do not take place within an area. Taking this approach could suggest the need to ban non-existing activities in areas because of the potential impact they could exert if they did take place.

ICES agrees with the conclusion of FIMPAS that additional fisheries measures within the Frisian Front to maintain the numbers of the great skua, the great black-backed gull, and the lesser black-backed gull are not likely to support the conservation objectives set for the Frisian Front.

ICES also agrees with the conclusion of FIMPAS that additional fisheries measures within the Frisian Front with regard to the interaction between the common guillemot and beam- and otter trawlers and demersal seine fishers are not warranted as they are not likely to support the conservation objectives set for the Frisian Front.

Request

Given the conservation objectives for bird species, ICES is requested to advise on the degree to which the implementation of the proposed fisheries measures will progress the Frisian Front SPA towards the achievement of the Conservation Objectives.

In preparing its response ICES is required to advise on the changes that can be attributed solely or primarily to the implementation of these proposed fisheries measures from the FIMPAS project. Specifically, for the proposed fisheries measures ICES is invited to describe:

- i) the likely progress over a six year period towards achieving the conservation objectives that will occur as a result of implementation of the proposed measures in the Frisian Front;*
- ii) the likely long term progress towards achieving the conservation objectives that will occur beyond the six year period as a result of implementation of the proposed measures in the Frisian Front areas;*
- iii) how progress towards achieving the conservation objectives could be measured and when such changes can be expected to be measurable*
- iv) the key aspects that should be contained in an appropriate, cost effective, monitoring programme to measure progress towards achieving the conservation objectives ;*
- v) The effort displacement within the SAC/SPA attributable to the proposed measures and the expected effects of such displacement on the achievement of the Conservation Objectives, together with any possible measures to mitigate any effects. When considering effort displacement other relevant factors causing changes in fishing patterns in the Frisian Front (e.g. TAC/quotas, fuel cost, other spatial claims etc.) should be taken into account;*
- vi) any shortcomings in the proposed measures and how these might be overcome*
- vii) any other information ICES considers relevant for the achievement of conservation objectives in the Frisian Front SPA for birds species*
- x) Invites ICES to comment on the need to make a distinction between different types of gillnets deployed in the Frisian Front SPA, in terms of their impact on meeting the conservation objectives;*

ICES advice

¹ This ICES advice is in response to specific questions on fisheries measures proposed by the Netherlands. Unless specifically stated, it is not an opinion from ICES on the designation of Natura 2000 sites or the Conservation Objectives set by the Member State. ICES facilitated input and advice in the FIMPAS process by identifying an expert who advised the process. This expert was not involved in any of the ICES review, drafting or advice approving processes. An ACOM Vice-Chair was assigned the task of following and observing the process. Expert reviewers and advice drafters were selected from independent countries as per ACOM procedures. The ICES advice drafting process was managed by the ACOM Vice-Chair; the scientific advice is the work of the independent reviewers and advice drafters.

ICES has decided to provide only general comments to this request because the impacts are likely to be minimal and difficult to measure. Some of the comments provided in the advice on the Cleaver Bank may also be relevant but they are not repeated here.

The Gear Impact Matrix developed in FIMPAS (Annex 1), suggests that interaction between various types of fishing gear and the great skua, great black-backed gull, and the lesser black-backed gull is low. The conservation status for these three bird species nationally in the Netherlands has been assessed as favourable. For the great skua and great black-backed gull the conservation status within the Frisian Front is assessed as unknown and for the lesser black-backed gull the conservation status in the Frisian Front was assessed as favourable. FIMPAS concluded that no proposal should be made for maintaining the number of these three species, as their numbers will likely decline with declining discards, for which no compensation could be imagined. Based on the available information and the interaction provided in the Gear Impact Matrix, ICES considers the conclusion by FIMPAS to be appropriate.

The Gear Impact Matrix identified the impact from midwater trawls on the common guillemot as low and from beam-and otter trawling and demersal seine fishing as medium. FIMPAS concluded that the medium impacts for common guillemot should not be considered further, since there is no *a priori* reason to believe that their foraging is adversely affected by the noise and light from trawling/seining operations. ICES does not have information to comment on these views. Based on the available information and the interaction provided in the Gear Impact Matrix, ICES considers the conclusion by FIMPAS to be appropriate.

The Gear Impact Matrix identified the impact from gillnets on the common guillemot as high. With regard to the common guillemot, the Frisian Front was designated as a Habitat Directive Special Protected Area (SPA) because the common guillemot occurs in the site at numbers exceeding 20 000 individuals. The conservation objective for the common guillemot is to maintain the extent and quality of habitat with the capacity to carry a population averaging 20 000 individuals in July–August. This is at a period when young common guillemots have not started to fly and the adults are unable to fly due to moulting.

Based on the information provided with the request to ICES, the gillnet fishery effort at the Frisian Front is generally zero with a very low effort along the southwestern boundary for the years 2006 to 2008. Accordingly, the risk to the population of common guillemot from gillnet fishing at the Frisian Front is very small. FIMPAS proposed a total ban on gillnet fishing in the site from June to November. In selecting this period, the precautionary approach was adopted to allow for future possibility of sea warming, which may change the period when the young and moulting common guillemots are present at the Frisian Front.

Gillnet fishery effort might increase in the future, for any of several reasons. These include: rising fuel costs that may lead to a shift from mobile gears to set nets; recovery of the North Sea cod stock, which traditionally was the main target species in gillnet fisheries, may result in renewed effort in that fishery; measures to reduce the impact of mobile, bottom-contacting fishing gears on benthic habitats and communities may result in shifts in effort from those gears to gillnets and other static gears. There is a considerable body of evidence pointing to significant bycatches of common guillemots in gillnets worldwide.

Given that gillnetting does not currently take place in the SPA, that the conservation status for this species with the SPA was assessed as favourable, and that the ban covers a period outside the period specified in the conservation objectives (July to August when there is evidence of the highest number of birds present on the site), ICES considers the proposed ban of gillnet fishing at the Frisian Front to be precautionary. However, given the potential risk to the common guillemot from gillnets and the potential for future changes in fishing patterns for the reasons discussed above, ICES agrees with the proposed measures. Notwithstanding this view in this specific situation, ICES has concerns with evoking the precautionary approach to ban activities that currently do not take place within an area. Taking this approach could suggest the need to ban non-existing activities in areas because of the potential impact they could exert if they did take place.

The conservation status of the common guillemot at the Frisian Front was assessed as favourable. The proposed measures will remove an as yet unquantifiable pressure on the guillemots and should therefore assist in maintaining this status. ICES does not see the need to comment on current monitoring and assessment methodologies as these appear to be fit for the purpose.

Sources

- ICES. 2012. Material provided to ICES for advice on proposed fisheries measures for Cleaver Bank and the Frisian Front. The FIMPAS project, September 2012. ICES CM 2012/ACOM:76.
- Melvin, E. F., Conquest, L. L., and Parrish, J. K. 1997. Seabird bycatch reduction: new tools for Puget Sound drift gillnet salmon fisheries: 1996 sockeye and 1995 chum non-treaty salmon test fisheries final report. Washington

Sea Grant. Project A/FP-7. Available on loan from the National Sea Grant Depository, and from publisher. WSG-AS 97-01. Available from: <http://wsg.washington.edu/mas/resources/sbexesum.html>.

Österblom, H., Fransson, T., and Olsson, O. 2002. Bycatches of common guillemot (*Uria aalge*) in the Baltic Sea gillnet fishery. *Biological Conservation*, 105 (2002): 309–319. Available from: <http://www.balticseabird.com/pdf/Bycatches%20of%20common%20guillemot.pdf>.

PROJECT GloBAL. Global bycatch assessment of long-lived species. Available from: <http://bycatch.nicholas.duke.edu/species/common-murre>.

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Harbour seal	Low	Low	Low	Low	Low
Grey seal	Low	Low	Low	Low	Low
Seabirds					
Great skua	Low	Low	Low	Low	Low
Great black-backed gull	Low	Low	Low	Low	Low
Common gullenot	Medium	Medium	Medium	High	Low
Lesser black-backed gull	Low	Low	Low	Low	Low

Gear Impact Matrix FIMPAS WS

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The judgement based on majority opinions. In most cells particularly for the Dogger Bank area there were a range of opinions; often industry stakeholders rated the impact lower than scientists and NGO's.

ECOREGION North Sea
SUBJECT Proposed fisheries measures for the Dogger Bank Special Area of Conservation

Advice summary¹

ICES considers that the diversity, and ambition, of the national conservation objectives makes development of a single management approach complicated and difficult. Reaching the stated conservation objectives is complicated in that there may be changes, both anthropogenic and natural, already imposed on the area that are irreversible. The response of the five different benthic communities to changes in fishing pressures will differ. Achieving the conservation objectives for some of the very long-lived species will, if possible, take decades. Recovery of benthic species will depend on the availability of source populations, some of which may only occur outside the closed areas. Recruitment in the entire North Sea will be affected by influences such as changes in fish community composition and climate change effects. The establishment of a monitoring programme and selection of indicators will require further work to ensure that the selected indicators are responsive to changes in pressures from mobile bottom-contacting fishing gears and that they can measure trajectories towards the stated conservation objectives. It will be necessary to establish the spatial and temporal variance and patchiness of the characteristics being measured by the indicators. ICES advises that this work be carried out in a coordinated manner across the entire Dogger Bank, drawing on, and having reference to, developments in monitoring under the Marine Strategy Framework Directive. A comparison of incremental improvement after a full six-year monitoring and assessment period could improve understanding of the implication of scale and provide better scientific guidance for the appropriate location and size of areas needed to achieve the conservation objectives.

ICES considers that the effect of seine fishing gear on the Dogger Bank sandbank habitat may not significantly impede the achievement of the conservation objectives. It is unlikely that, under the current proposal, displacement will be a significant problem but there may be increased fishing efforts along the open/closed boundaries. A mechanism to allow experimental trials with low impact gear in part of the closed area, verifying results that indicate no likely impacts on the conservation objectives, should be established. Short-term access to the closed areas at specific times may be possible without compromising the conservation objectives, but should first be thoroughly evaluated.

Request

Germany, the Netherlands, and the UK have sent the following request to ICES.

ICES is requested to advise on the degree to which the implementation of the proposed fisheries measures² in the Presentation Paper will contribute to the achievement of the established conservation objectives, taking into account the wish of the Dogger Bank states to consider the Dogger Bank as one ecosystem.

The three Member States have taken note of the ICES advice from 2008 on protection of the German Natura 2000 site on the Dogger Bank (EMPAS Advice). As the advice requested in this procedure affects the German sector, ICES is asked to provide a rationale for any deviation from the 2008 advice.

In preparing its response ICES is required to advise on the changes that can be attributed solely or primarily to the implementation of the proposed fisheries measures. Specifically, if the proposed fisheries measures described in the three proposals (closed areas to certain gear types) are implemented, ICES should describe:

- ii) The likely progress over a six year period towards achieving the conservation objectives that will occur as a result of implementation of the proposed measures in the closed areas and in the habitat type 1110 in the Dogger Bank SAC;*

¹ This ICES advice is in response to specific questions on fisheries measures proposed by relevant authorities of Member States. Unless specifically stated, it is not an opinion from ICES on the designation of Natura 2000 sites or the Conservation Objectives set by the Member States for those sites. ICES facilitated input and advice in the Dogger Bank process by identifying an expert who advised the process. This expert was not involved in any of the ICES review, drafting or advice approving processes. An ACOM Vice-Chair was assigned the task of following and observing the process. Expert reviewers and advice drafters were selected from independent countries as per ACOM procedures. The ICES advice drafting process was managed by the ACOM Vice-Chair; the scientific advice is the work of the independent reviewers and advice drafters.

² The proposal from Germany, the Netherlands, and the UK is shown in Annex 1.

- ii) *The likely long term progress towards achieving the conservation objectives that will occur beyond the six year period as a result of implementation of the proposed measures in these areas;*
- iii) *How progress towards achieving the conservation objectives could be measured and when such changes can be expected to be measurable;*
- iv) *The key aspects that should be contained in an appropriate, cost effective, joint monitoring programme to measure progress towards achieving the conservation objectives;*
- v) *The likely impacts of seines including fly-shooting on attaining the conservation objectives for the Dogger Bank habitat type 1110 and an assessment of the likely additional benefits for the achievements of the conservation objectives from the prohibition of these gears in the managed /closed zones and – if available data are not sufficient for a concluding analysis – identification of missing data and how to obtain such data;*
- vi) *The effort displacement within the SAC attributable to the proposed measures and, the expected effects of such displacement on the achievement of the conservation objectives for habitat type 1110 in the SAC area, together with any possible measures to mitigate any effects. When considering effort displacement other relevant factors causing changes in fishing patterns in the Dogger Bank (e.g. TAC/quotas, fuel cost, other spatial claims etc.) should be taken into account;*
- vii) *Any shortcomings in the proposed measures and how these might be overcome;*
- viii) *Summarise under points i) to iii) in a comparative analysis the difference to the improvements to the conservation status between the implementation of the proposed measures of the DBSG, the NGO and the fishing sector proposals. The two latter proposals are described in the NSRAC Position Paper of April 2012. In this comparative analysis ICES should comment on the relationship between the size and location of the closed areas and the progress towards achieving the conservation objectives;*
- ix) *Any other information on fishing impacts ICES considers relevant to the achievement of conservation objectives in the SAC area for habitat type 1110.*

ICES advice

Dogger Bank conservation objectives

In the documentation submitted to ICES with the request it is stated that

The purpose of fisheries measures is to reduce the pressure on the benthic habitat from bottom contacting fishing gear with a view to contributing to the achievement of the conservation objectives. The conservation status is currently assessed as unfavourable.

In order to put the request and ICES response into context, additional information on the conservation objectives is available in Annex 2.

ICES considers that the diversity of the national conservation objectives makes development of a single management approach complicated and difficult. The different objectives (improve/restore/recover) have different outcomes and all depend on agreement on what constitutes a favourable status for habitat type 1110 with respect to stated indicators that are yet to be defined (as noted by the UK). The “improve” objective further requires knowledge of the recovery trajectories of selected indicators, which will not be linear, so that status can be evaluated along the path towards the objective state. This assumes that full recovery is possible even if some of the changes (due to both anthropogenic and natural factors) already imposed on the area may be irreversible.

More specific restoration objectives commonly agreed to by UK, Germany, and the Netherlands are listed as:

- 1) For abiotic and biotic factors in the area to achieve a state which enables benthic communities to reach and maintain a good state of preservation.
- 2) Benthic communities should be shaped by characteristic, in particular long-lived, species. Of these species individuals should be present of all typically occurring species and in natural proportions of size and age.
- 3) Characteristic fish species should be present in characteristic population structures and of all typical species in natural proportions of size and age.

ICES notes that these conservation and restoration objectives are very demanding. However, if their achievement is couched in terms of natural recovery following removal of fishing pressure then any change in status could be considered as achieving some degree of restoration. ICES also cautions that if the indicators that were used to assess the original determination of unfavourable status were not based on the restoration objectives noted above, then it will be important to re-evaluate current status against an agreed set of indicators so that change can be effectively tracked.

Response to Question i) The likely progress over a six year period...

Given the caveats noted above for framing change in status within an envelope of baseline and target conditions, in responding to this question ICES has assumed that recovery is possible and that any changes that have occurred are not irreversible. Further, ICES can only respond to this question in abstract terms given that full information on the size/age composition for most of the "typical" species (excepting lesser sandeel and plaice) is unknown.

ICES considers it likely that changes in status of the typical species in the five different benthic communities will differ due to differences in species composition, population dynamics, depth, and sensitivity to fishing impacts.

Within the list of typical species for the area, lifespans range from several years or less (e.g., *Spisula subtruncata*, *Acrocnida brachiata*, *Lanice conchilega*) to centuries (*Arctic islandica*), although there are few species with very long lifespans. Given that the current population structure of the longest-lived species, *Arctic islandica*, appears to be altered from baseline conditions with fewer large animals found on the bank than formerly, and that restoration objective 2 noted above requires this species to be present in natural proportions of sizes and ages, it is clear that the conservation objectives will not be met in a six-year time frame.

Selecting and closing areas of the Dogger Bank particularly appropriate for supporting some now uncommon or rare benthic species will result in more progress being made in six years towards restoration of healthy populations of species characteristic of the Dogger Bank. The more areas included, the more progress made, although the relationship between the amount of area closed to fishing and the six-year progress towards restoring populations of all characteristic species is not simple and linear.

For species with lifespans of less than six years, recovery is possible provided that recruitment occurs within the area. Many short-lived species are subject to fluctuations in recruitment due to environmental conditions and detecting change in their abundance will require an appropriately designed monitoring programme. This also applies to the biogenic reefs formed by aggregations of *Lanice conchilega* tubes which appear to have good recovery potential over this time frame.

ICES notes that pelagic larval duration is an important consideration, and that the source/sink dynamics for most of the typical species are unknown; consequently source populations may occur in areas outside of the proposed closed area. For some fish populations whose effective breeding populations extend well beyond the Dogger Bank no measures applied solely on the Dogger Bank will allow recovery of the historical age and size compositions of these populations, as long as fishing, even at sustainable levels, is allowed outside the Dogger Bank. In such cases, if the source populations are impacted by ongoing fishing then no or slow rates of change may occur in the proposed closed area. Furthermore, if displaced effort increases the impact on those source populations outside the closed area, then recruitment to the closed area could be further retarded.

Response to Question ii) The likely long term progress...

All of the issues raised in the response to the previous question have relevance here, given the lifespan and recruitment dynamics of the typical species. The connectivity of populations on the Dogger Bank has implications for direct colonization and recovery of impacted areas. Additionally, over longer time periods (>6 years), changes in fish community composition occurring at large spatial scales throughout the North Sea could influence progress towards achieving the stated conservation objectives in the Dogger Bank. This is because many fish species prey on benthic species at some point in their life cycle and changes to the predation pressure may influence recovery trajectories of the benthos. Environmental changes such as those resulting from climate are also expected to be expressed over these longer time periods and will affect conservation objectives in unknown ways (new species moving in, changes in water chemistry and pelagic production, etc.). Environmental change will influence rates of changes as well as changes in state. In relatively high-energy environments, characteristic species and communities are all adapted to some frequency of natural disturbance. Hence, for time periods longer than six years there will continue to be an increase in the number of species that re-establish self-sustaining populations, but there will be diminishing gains over longer time periods. However, that is not cause to suspend restrictive management after six years. In general, the fisheries management measures suggested will reduce the pressure on the benthic habitats from bottom-contacting fishing gears, although the scale of this effect and consequences to the status of the habitats are not possible to predict.

Response to Question iii) How progress could be measured and changes can be expected to be measurable

As noted above, it is imperative that an operational framework be built around the stated conservation objectives. This will entail establishment of appropriate indicators which will allow for target setting and evaluation followed by an appropriate monitoring programme (see below). Ongoing work by ICES has outlined a prioritized list of eighteen criteria that should be considered when selecting indicators (ICES, 2012a). Evaluation of indicators against these criteria considers *inter alia* the quality of the available data, responsiveness of the indicator to the pressure of interest,

and links to conceptual and/or theoretical underpinnings. Not all of these criteria are expected to be met by any one indicator and not all may be relevant to the present application. Table 6.3.3.9.1 provides an overview of a preliminary list of generic criteria for indicators along with an evaluation of their priority for any monitoring programme. Indicator redundancy, i.e. groups of metrics or indicators that co-vary significantly, providing duplicate copies of a single signal rather than reflecting different independent signals, should be avoided.

Table 6.3.3.9.1 Preliminary list of priority for criteria by which to assess the suitability of indicators (ICES, 2012a).

Number	Criterion/Characteristic	Priority
1	Methodological approach to defining the target should be consolidated	Essential
2	Existing reference conditions	Essential
3	Relevant spatial domain	Desirable
4	Environmental fluctuations and climate	Desirable
5	Related to change in specific pressures	Essential
6	Uncertainty	Desirable
7	Relevant to management objectives	Essential
8	Relevant to management measures	Essential
9	Comprehensible	Desirable
10	Established target	Desirable
11	Pragmatic	Desirable
12	Theoretically sound	Essential
13	Early warning	?
14	Target suites	Desirable
15	Compatibility	Desirable
16	State, impact, pressure, and operational targets	Essential
17	Relevance to MSFD ecosystem components	Essential
18	Cross-application	?

ICES anticipates that different indicators will be required for each or some of the five different benthic communities identified for the Dogger Bank due to differences in species composition and response to changes in pressure. Further, more than one indicator will be required for each area, given the three conservation targets. Consideration of the relative importance of the indicators in each area when assessing overall status may be required and will relate back to relative importance of the conservation objectives.

Response to Question iv) An appropriate, cost effective, joint monitoring programme...

It is a priority to establish a comprehensive baseline study and this should be informed by previous work on the Dogger Bank. This is a prerequisite to designing a monitoring programme to measure progress or otherwise towards the conservation objectives. Suitable control areas, outside of the closed area where normal fishing operations are conducted, should be selected for each of the five benthic communities. The spatial and temporal variance and patchiness of the species or ecological elements to be monitored needs to be understood and addressed in the design of a monitoring programme. Standard power curve analyses can be used to determine the precision needed to detect a difference of a given size (say a 25% increase in abundance of a population) with a specified (usually high) probability. To determine the sampling effort needed to achieve the necessary level of precision, it is then necessary to know how variance in the population estimate increases with sampling effort. For the overall objectives of improved environmental status for the communities on the sand banks, improvements in the more common species will contribute most to healthy functioning of ecosystem processes. Such improvements are usually best measured with a representative, spatially stratified random survey design. However, for objectives related to specifically improving the status of rarer species, particularly ones with specialized ecological requirements, targeted sampling will be more efficient. For rarer species, having accurate estimates of likelihood of encounter and total range of occurrence are properties that are possible to quantify with sufficient precision to allow evaluation of trends over time.

ICES highly recommends that a common and coordinated monitoring programme for the entire Dogger Bank should be established and used by each country. Use of established protocols for related subjects (e.g. wind farm EIA (environmental impact assessment), or oil-spill monitoring) should be considered. Standards such as EN 16260:2012 (CEN, 2012) on visual seabed surveys and ISO 16665:2005 (ISO, 2005) on sampling marine soft-bottom macrofauna could inform this process.

The monitoring requirements of the Marine Strategy Framework Directive and developments within OSPAR will also provide an opportunity for coordination. Currently, the ridged structure and focus on fish stock assessment of Data Collection Framework (DCF) surveys means that they could provide only limited data and information for the likely

monitoring requirements on the Dogger Bank. With minimal adjustments, DCF surveys could provide useful data on commercial species such as plaice, sandeel, and possibly other elements. Current developments aiming at closer cooperation between the DCF and environmental monitoring will bring efficiencies in the coming years.

It will be appropriate to target monitoring effort in areas that are judged to be controversial and/or sensitive, for example, areas where moderate to high fishing effort has occurred prior to the closure, across the interface between open and closed areas and the transition between the different benthic communities. Cooperation with the fishing industry could bring efficiencies and provide cost-effective access to the sites.

A variety of sampling and data collection methods are available, such as high-frequency echograms combined with sidescan sonar, underwater video, bait-camera systems, grab sampling and dredge sampling, and it is likely that a combination of these and other methods will be required.

Response to Question v) The likely impacts of seines including fly-shooting and the likely additional benefits from the prohibition of these gears...

Seine gear is moved while in contact with the bottom and can theoretically impact the biota and disturb the seabed. Little is known on the impacts of the various types of seine fishing gear on the benthic communities. Impacts will depend on the target species and associated substrate type, but effects on plain sand bottom are likely to be low. Given the lack of information on the impact of seining in its different forms a risk analysis such as Ecological Risk Assessment for the Effects of Fishing (ERAEF) (WGECC; ICES, 2012a) is a useful first step. This would provide an extended gear matrix to supplement the one carried out by FIMPAS. For example, comparisons with beam trawls in a relative framework, taking into account the efficiency of the fishery, the swept area, and the costs associated with gear change could be evaluated. Such a study could provide a semi-quantitative approach to evaluating the pressures on the benthic communities of different types of seine gear such as fly-shooters (Scottish seiners) and anchor seiners. However, based on current knowledge ICES considers that the effect of seine fishing gear on the Dogger Bank sandbank habitat may not significantly impede the achievement of the conservation objectives.

Response to Question vi) The effort displacement within the SAC...

The data appears to be available to quantify effort displacement magnitudes and costs, not only for areas within the Dogger Bank but anywhere in the southern North Sea, and ICES advises that these quantifications be undertaken.

The sandeel fishery is a specific localized activity primarily at the edges of the Dogger Bank. Closures are not proposed for the most important sandeel fishing areas. The proposal to close areas in the central part of the Dogger Bank will affect the less important sandeel fisheries thus having only a minor displacement effect on the sandeel fishing effort.

There is an important beam trawl fishery for flatfishes on the Dogger Bank. The proposed closure of areas where this beam trawl fisheries occurs will result in some displacement of this fishing effort.

In the current DBSG proposal there is no restriction on the use of seine fishing gear. The shallower areas proposed for closure to beam and otter trawling are important seine fishing grounds. ICES advises that if these shallower areas were to be closed to seine fishing it will result in substantial displacement of this fishing effort while achieving minimal reduction of the pressure on these areas.

Response to Question vii) Any shortcomings in the proposed measures

In the documentation supplied to ICES with the request it is stated that the fisheries management proposal for the Dogger Bank SAC shall be designed so that overall, approximately the same proportion of each benthic communities' area is protected. Given that the areas of the different communities vary widely, closing equal proportions of these areas assumes that ecological processes are scale independent. There does not seem to be scientific evidence in the supporting material for this assumption. Some minimum size may be essential for each type of benthic community, but it may not be the same for each. Furthermore, the proposal does not seem to have been developed with a focus on adaptive management relevant to both meeting conservation objectives and climate change. A comparison of incremental improvement after a full six-year monitoring and assessment could improve understanding of the implication of scale and provide better scientific guidance for the appropriate location and size of the areas needed to achieve conservation objectives.

Response to Question viii) Summarise the difference to the improvements to the conservation status between the DBSG, the NGO and the fishing sector proposals...

It is not possible to predict how, or over what time period, the Dogger Bank will respond to reduced pressures from fisheries or for that matter respond to wider environmental pressures such as climate change or acidification. In terms of

size of the areas to be closed, there is no “best percent”. The nature of the ecosystems, the nature of the potential threats, and the nature of the management outside the protected areas combine to make the optimum area to protect a case-specific consideration. From an ecological perspective there is no need to protect all of any benthic community type or sedentary species range; as long as the areas that are protected are large enough to sustain viable populations, the current proposal seems to achieve that. As mentioned above there are some mobile fish populations whose effective breeding populations extend well beyond the Dogger Bank and no measures applied solely to the Dogger Bank will allow recovery to the historical age and size compositions of these populations, as long as fishing, even at sustainable levels, is allowed outside the Dogger Bank. Based on information provided with the request, the areas proposed by the industry may not be sufficient and the areas proposed by the NGOs may be excessive. The current proposal for fisheries measures, if implemented, will provide an opportunity to monitor and assess the response of the ecosystem to the reduced pressure from bottom-contacting fishing gear. This information is needed before it will be possible to carry out a scientific comparative analysis.

Response to Question ix) Any other information on fishing impacts...

Fisheries management measures will directly affect at least two different trophic levels; however, food chain effects are not evaluated with regard to achieving favourable conservation status. For mobile species (most fishes) closures will only have effects proportional to the population distribution. For more sessile species (sandeels to some degree and many invertebrates to a high degree) populations may be able to build up biomasses that may have spill-over effects which could have positive influences on commercial species yield outside the closed areas. This could result in increased fishing efforts along the open/closed boundaries and could have an adverse effect on local recruitment. Increased biomass may also attract commercial fish which prey on benthic communities and thereby reduce availability to the fishery in the open area.

Developments in low impact gear should continue and when proven not to have adverse effects on the benthic communities of the closed areas their use in these areas should be permitted. This may require experimental trials within a closed area but should only be permitted at the very late stages of a research programme and only to verify results indicating no likely impacts on the conservation objectives. ICES advises that a decision-making process should be established to consider such access.

In addition, economic mitigation measures within the closed areas that consider the spatial and temporal distribution of fishing should be considered. There may be times when, due to seasonal or tidal influences, gear/species interaction is reduced to an extent that the use of banned gear would not compromise the attainment of the conservation objectives. In these situations, the short-term pulse disturbances of such access could be tolerated. This should be evaluated and, if considered viable, a mechanism established for permitting such short-term access.

Sources

- CEN. 2012. Water quality – Visual seabed surveys using remotely operated and/or towed observation gear for collection of environmental data. BS EN 16260:2012.
- ICES. 2009. Report of the EMPAS project (Environmentally Sound Fisheries Management in Protected Areas), 2006–2008, an ICES–BfN project. 123 pp.
- ICES. 2012a. Report of the Working Group on the Ecosystem Effects of Fishing Activities (WGECO), 11–18 April 2012; Copenhagen, Denmark. ICES CM 2012/ACOM:26. 192 pp.
- ICES. 2012b. Material provided to ICES for advice on proposed fisheries measures for the Dogger Bank Special Area of Conservation. Dogger Bank Steering Group, September 2012. ICES CM 2012/ACOM:77.
- ISO. 2005. Water quality – Guidelines for quantitative sampling and sample processing of marine soft-bottom macrofauna. ISO 16665:2005.

Gears with bottom-contact and which are expected to have a significant effect on the habitats are banned in the closed zone. This includes beam trawls and otter board trawls and dredges. However, other bottom contacting gears are used in the Dogger Bank site which may present a risk to the achievement of the conservation objectives, i.e. seines including flyshooting as indicated by the ICES 2008 EMPAS advice. There was no consensus whether the prohibition of other bottom contacting gears, in particular seines including flyshooting, should apply to the proposed closed areas. In so far as seines including flyshooting are concerned, the DBSG considered that there was insufficient information on the adverse effects of these gears on the conservation status of the whole of the SAC. However, the DBSG recognised that the management of "all mobile bottom contacting gear" had been proposed as a part of the EMPAS advice (advice relating to the conservation of the German sector), when this was assessed in isolation in 2008. Therefore DBSG has asked ICES to advise on the potential impacts of these gears on the habitat and on additional beneficial effects that may accrue if these gears were prohibited from the overall proposed closed area;

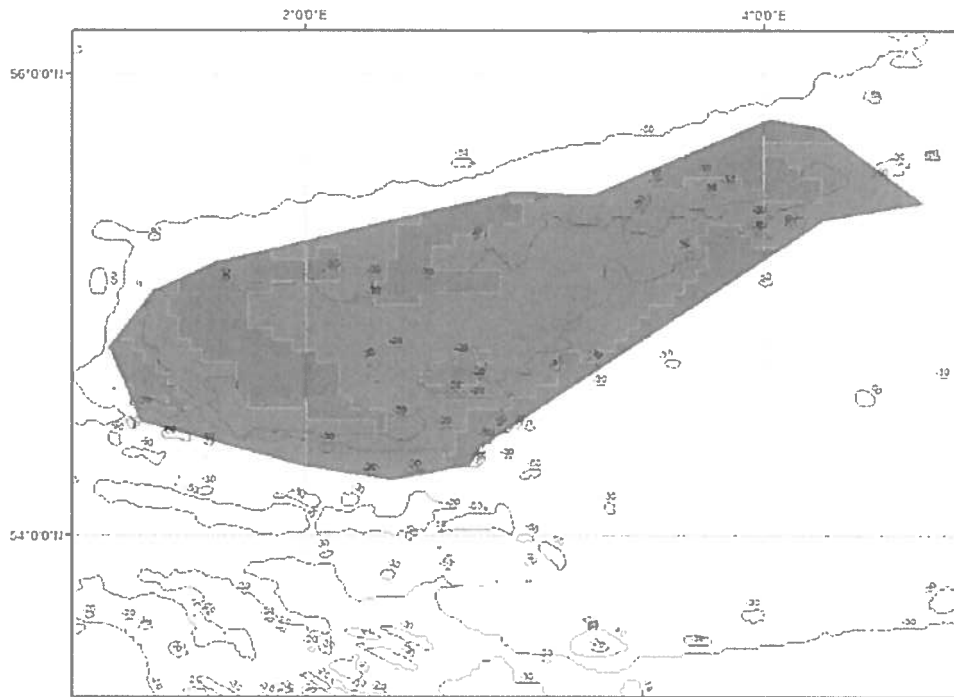


Figure 6.3.3.9.1 Proposal for closed areas including depth contours. Green: areas closed to beam and otter board trawls and dredges.

- *The conservation status is currently assessed as unfavourable, due mainly to the quality of the habitat and considerations of disturbances of the biological community which result from impacts to sediments;*
- *This assessment mentions significant habitat disturbance as a result of (bottom-contacting) fishing, and that fishing has distorted the species composition – towards smaller and short-lived species;*
- *Therefore the Member States want to decrease human pressure from the habitat as a result of bottom-contacting fishing gear, with the aim to: improve the quality of the habitat (NL); restore the habitat to favourable condition (UK); conservation and restoration of a favourable conservation status of the habitat type (1110) including its characteristic and threatened communities and species (GER);*
- *In doing so, they want to establish a more natural situation in which*
 - *physical structure (the shape, form and composition of the habitat and its substrata),*
 - *diversity (the number of different biological communities or number of species within a given community),*
 - *community structure (e.g. age classes, sex ratios, distribution of species, abundance, biomass, reproductive capacity, recruitment, range and mobility), and*
 - *typical species are improved/are restored/are recovered;*

Appendix 2 Processtappen

2008

- Aanmelding van de gebieden (inclusief ter inzage legging van de Standaardgegevensformulieren)

2009

- Concept wetenschappelijk advies over te stellen Natura 2000-doelen in de gebieden; 3 workshops hierover; finaal wetenschappelijk advies; bespreking definitief advies in Regiegroep VIBEG met alle betrokken Nederlandse stakeholders.
- Start FIMPAS-project
- Wetenschappelijke basisanalyses beschikbare data en literatuur van IMARES

2010

- 1^e FIMPAS Workshop (Scheveningen, data-analyse)
- Wetenschappelijke basisanalyses literatuur over conflict visserij vs. natuur in de Natura 2000-gebieden
- 2^e FIMPAS Workshop (Hardelot, Frankrijk, conflict-analyse)
- Opstellen concept maatregelen; bespreking met Nederlandse stakeholders in regiegroep VIBEG

2011

- 3^e FIMPAS Workshop (Den Helder, conceptmaatregelen): Friese Front akkoord, vervolgproces Klaverbank, vervolgproces Doggersbank
- Start Doggerbank Stuurgroep (DBSG), waarin Nederland, Duitsland, Verenigd Koninkrijk en Denemarken samenwerken, en de visserij- en natuurorganisaties en de Europese Commissie deelnemen. Nieuwe opdrachtverlening aan ICES voor wetenschappelijke ondersteuning.
- Alternatief sectorvoorstel Klaverbank krijgt geen steun van FIMPAS stuurgroep en natuurorganisaties. FIMPAS Stuurgroep maakt compromis gebaseerd op informatie van visserijbedrijfsleven; nieuwe visserijmogelijkheden in het N2000 gebied. Visserij- en natuurorganisaties willen tot tweemaal toe overlegproces niet heropenen. Regiegroep VIBEG constateert dat het voorstel van de FIMPAS Stuurgroep dus blijft staan.
- 4^e FIMPAS Doggersbank Workshop onder auspiciën DBSG: uitgangspunten conceptmaatregelen voor Doggersbank overeengekomen. Op basis hiervan pakt de North Sea Advisory Council (NSAC) handschoen op om gezamenlijk voorstel van visserijbedrijfsleven en de natuurorganisaties te ontwikkelen.

2012

- Stakeholderproces onder leiding van een onafhankelijk externe voorzitter blijft zonder resultaat en NSRAC geeft opdracht terug aan de Doggersbank Stuurgroep (DBSG), met twee aparte voorstellen: één van de visserijsector en één van de natuurorganisaties.
- DBSG ontwikkelt een ontwerp-maatregelpakket gebaseerd op alle voorafgaande stappen, en op basis van beide voorstellen.
- Adviesaanvraag aan ICES over Doggersbank, Klaverbank en Friese Front.
- Tijdens het adviesproces van ICES wijzigt de sector haar voorstel voor de Doggersbank.
- ICES brengt advies uit.

2013

- Op basis van het ICES-advies werkt DBSG, nog steeds met deelname van de belanghebbenden, het finale voorstel Doggersbank uit.
- Nederland werkt op basis van de conceptmaatregel voorstellen en het ICES-advies de maatregelen voor Klaverbank en Friese Front uit.
- Op 22 mei 2013 wordt op ambtelijk – directeuren - niveau akkoord gegeven aan het maatregelenpakket voor de Doggersbank door Nederland, Duitsland, Verenigd Koninkrijk en Denemarken. Later dat jaar volgt politiek akkoord van Duitsland, VK en Denemarken.
- Bij behandeling van het wijzigingsvoorstel van de NB-wet zijn twee moties aangenomen. TK 32002 nr. 32 die verzoekt tot het opstellen van een maatregelenpakket waarvoor draagvlak is bij het visserijbedrijfsleven en waarbij de voorstellen van het visserijbedrijfsleven serieus zijn betrokken bij de maatregelen. En TK 32002 nr. 33, die vraagt om het voorleggen van de visserijmaatregelen aan de TK.
- In de DBSG wordt het verdere proces van het maatregelenpakket richting EC besproken; derde landen met een management interest moeten worden geconsulteerd en een

gezamenlijke aanbeveling worden gedaan. Dit wordt via de Scheveningengroep verwerkt. Voorbehoud Nederland m.b.t. parlementaire procedure. Zolang NL voorbehoud niet wordt opgeheven kan geen voortgang worden gemaakt.

- Op politiek niveau kan Nederland geen akkoord geven, vanwege de moties.
- Economische informatie wordt up to date gebracht.

2014

- De visserijsector heeft vooral moeite met de maatregelen zoals deze zijn opgesteld voor het Duitse deel van de Doggersbank. Om te voldoen aan de motie wordt meerdere malen contact gezocht tussen Duitsland en Nederland. Eind juni heeft overleg plaatsgevonden tussen het visserijbedrijfsleven en Duitsland. Dit heeft niet in een oplossing geresulteerd.
- Duitse minister geeft aan niet af te willen wijken van de eerder gemaakte afspraken t.a.v. Duitse deel Doggersbank.

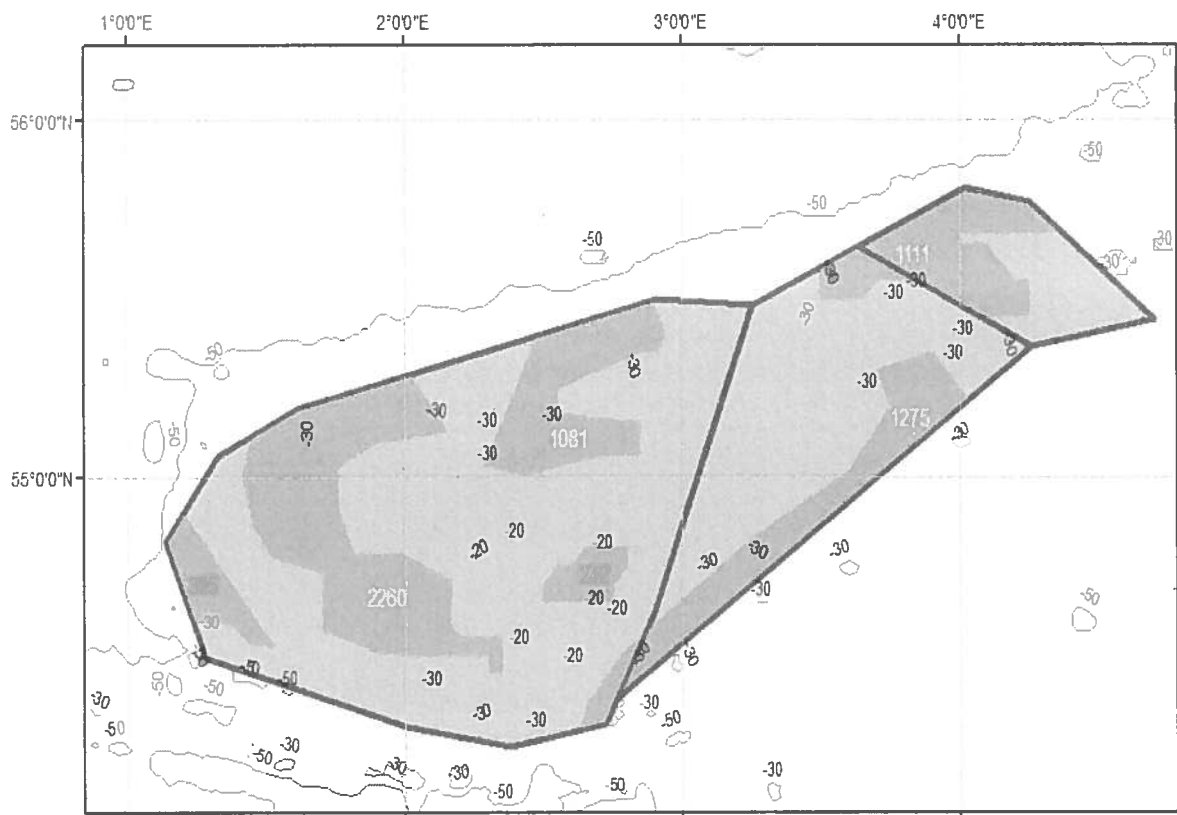
Appendix 3 Overzichtskaart Natura2000 gebieden op de Nederlandse Noordzee



Appendix 4 Kaart zonerings Doggersbank

Legenda: groen is gesloten en blauw is geopend voor visserij

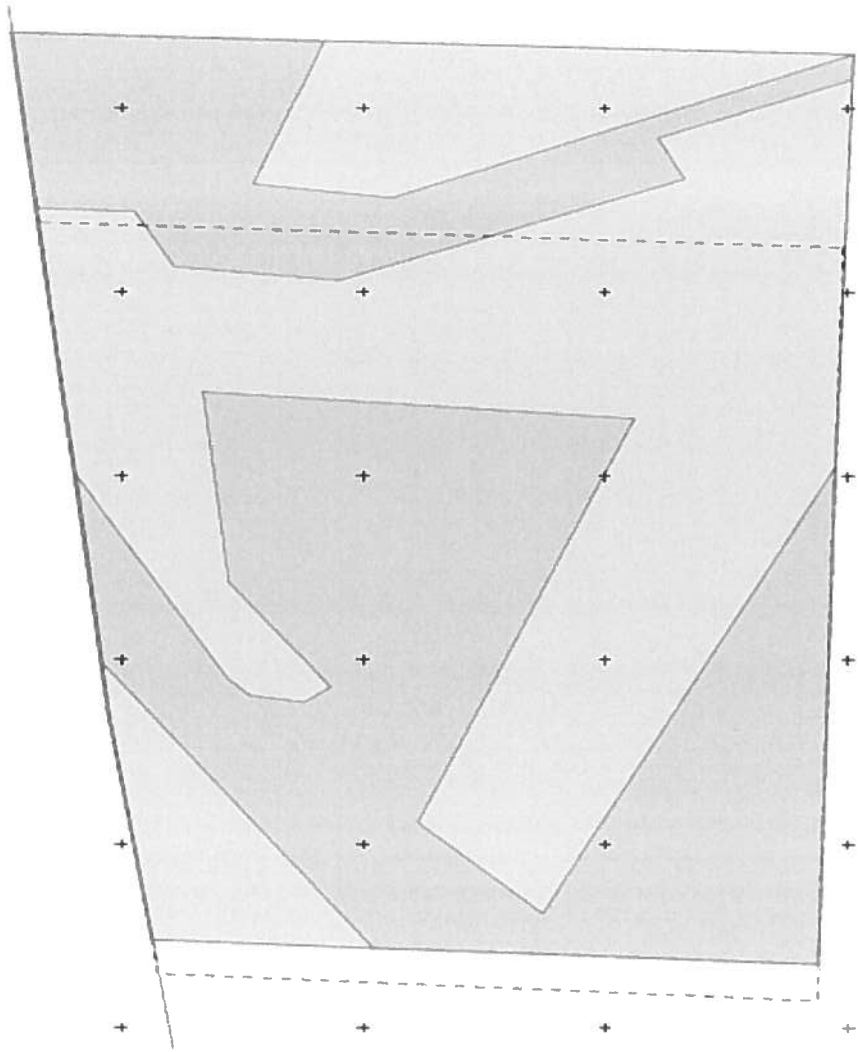
Doggersbank



Appendix 5 Kaart zonerings Klaverbank

Legenda: groen is gesloten en blauw is geopend voor visserij

Klaverbank



Appendix 6 Kaart Friese Front

Friese Front

