PROTOKOLL
FOR DEN 31. SESJON I DEN BLANDETE
NORSK-RUSSISKE FISKERIKOMMISJON

1. Åpning av sesjonen

Den 31. sesjon i Den blandete norsk-russiske fiskerikommisjon ble avholdt i Kabelvåg 4. – 8. november 2002. Den norske delegasjon ble ledet av J. Krog, representant for Kongeriket Norges regjering i Den blandete norsk-russiske fiskerikommisjon, departementsråd i Det kgl. Fiskeridepartement. Den russiske delegasjon ble ledet av A. Makojedov, representant for Den russiske føderasjons regjering i Den blandete norsk-russiske fiskerikommisjon, viseformann i Den russiske føderasjons statskomité for fiskerier.

Partenes delegasjoner fremgår av Vedlegg 1.

2. Godkjenning av dagsorden

Partene godkjente dagsorden, jfr. Vedlegg 2.

3. Arbeidsgrupper

I samsvar med § 3 i Forretningsordenen for Den blandete norsk-russiske fiskerikommisjon oppnevnte partene felles arbeidsgrupper for:

- statistikk
- sel i det nordøstlige Atlanterhav
- forskningssamarbeid
- protokoll.

4. Utveksling av fangststatistikk for 2001 og hittil i 2002

Partene utvekslet fangststatistikk over fisket i Barentshavet og Norskehavet i 2001 og hittil i 2002 på omforente skjemaer. Partene konstaterte at de statistiske opplysningene var presise og sammenfallende.

Partene var enige om å samarbeide om å fremskaffe fullstendig informasjon om landinger i tredjeland. Partene var enige om å benytte tabell VI, utarbeidet av Det permanente utvalg under møtet i Murmansk 2. – 8. oktober 2001 ved utveksling av slik informasjon, og den norske part etterlyste slik informasjon fra den russiske part.

Den russiske part informerte om at den vil fortsette arbeidet med å fremskaffe data om landinger i tredjeland.

Partene var enige om å videreføre den regelmessige utveksling av månedlig fangststatistikk for fisk og reker fordelt på ICES-område I og II.

5. Regulering av fisket etter torsk og hyse i 2003

5.1 Fastsettelse av totalkvoter og fordeling av kvoter

Partene var enige om at det er en usikkerhet i bestandsanslaget for norsk arktisk torsk, og understreket sterkt behovet for økt forskningsinnsats og tokt i hele bestandens utbredelsesområde for å få mer eksakte resultater. Partene viste til at Det internasjonale råd for havforskning (ICES) også har påpekt at manglende toktdekning svekker troverdigheten av den vitenskapelige rådgivning.

Partene var enige om at det er behov for å videreutvikle omforente langsiktige strategier for forvaltning av fellesbestandene i Barentshavet og Norskehavet. Partene viste i denne sammenheng til det gode grunnlag som er lagt av "arbeidsgruppen for beskatningsstrategier", jfr. punkt 12.2 og Vedlegg 11. Partene bekreftet målsettingen om raskt å bygge gytebestanden av torsk opp til B_{pa} og å bringe fiskedødeligheten ned på et nivå F_{pa}=0.42. Partene imøteser ICES sin revisjon av B_{pa} og F_{pa}.

Partene var enige om at beskatningsstrategiene for torsk og hyse må ivareta hensynet til:

-å tilrettelegge for en langsiktig høy avkastning av bestandene
-ønsket om stor grad av stabilitet i TAC fra år til år
-full utnyttelse av den til enhver tid tilgjengelige informasjon om bestandsutviklingen

På dette grunnlag fastsatte partene følgende beslutningsregel for den årlige kvotefastsettelse for norsk arktisk torsk gjeldende fra 2004:

-beregn gjennomsnittlig TAC-nivå for de 3 kommende år basert på F_{pa}. TAC for neste år fastsettes til denne utgangsverdien av TAC for disse 3 årene.
-påfølgende år gjentas beregningen av TAC for de neste 3 år basert på oppdatert informasjon om bestandsutviklingen, dog slik at TAC ikke skal endres med mer enn +/- 10% av TAC for foregående år
-dersom gytebestanden faller under B_{pa} vil partene måtte vurdere lavere TAC enn det beslutningsregelen tilsier.

Partene var enige om en tilsvarende beslutningsregel for hyse, men da basert på F_{pa} og B_{pa} for hyse, og med en mulig endring i TAC fra foregående år på +/- 25%. (På grunn av større naturlig bestandsfluktuasjon).

Partene var enige om at arbeidsgruppen som utarbeidet dokumentet "Grunnleggende prinsipper og kriterier for langsiktig, bærekraftig forvaltning av levende marine ressurser i Barentshavet og Norskehavet" det kommende år skal utarbeide eksempler på hvordan disse beslutningsregler vil virke. Arbeidsgruppen skal spesielt se på hvilken grense for prosentvis årlig endring det vil være hensiktsmessig å benytte.

Partene fastsatte totalkvoter for torsk og hyse for 2003 samt fordeling av disse på Norge, Russland og tredjeland (Vedlegg 3). Fordeling av tredjelandskvoten på soner for 2003 er gjengitt i Vedlegg 4.

Partene ble enige om gjensidige kvoter av torsk og hyse i hverandres økonomiske soner,

Jfr. Vedlegg 5.

Partene var enige om at de ved behov vil vurdere mulighetene for gjensidige overføringer av kvoter for torsk, hyse og andre fiskeslag i løpet av 2003 og mulighetene for å gi adgang for økning av partenes kvoter i hverandres soner.

Fiske med garn, line og håndredskap skal gjennomføres innenfor de kvoter partene har fastsatt.

Partene var videre enige om å informere hverandre om kvoter som tildeles tredjeland av fellesbestander, herunder om de kvanta som tildeles innenfor kommersielle prosjekter.

Partene var enige om å konsultere hverandre om eventuelle overføringer av kvoter tildelt tredjeland av Norge eller Russland til den annen parts sone.

5.2 Andre tiltak

Partene orienterte hverandre om resultatene av gjennomførte forsøk med sorteringssystemer. Partene var enige om å fortsette arbeidet med utvikling av seleksjonsteknologi i fiskeredskaper.

Partene var enige om å videreføre utveksling av informasjon om det biologiske grunnlagsmateriale for stengning og åpning av fiskefelt på omforent skjema utarbeidet av Det permanente utvalg.

Partene ba Det permanente utvalg om å fortsette effektivitetsstudier av praktisk bruk av sorteringssystem ved bruk av ulike materialer med det formål å avklare den videre utvikling og bruk av slike system.

5.2.1 Tekniske reguleringer

Partene var enige om at det er et langsiktig mål å innføre felles tekniske reguleringstiltak, herunder ens maskevidde og ens minstemål for hele utbredelsesområdet for torsk og hyse.

Tekniske reguleringstiltak fremgår av Vedlegg 7.

6. Regulering av fisket etter lodde i 2003

Partene var enige om en beskatningsstrategi for lodde der TAC ikke settes høyere enn at, med 95% sannsynlighet, minst 200.000 tonn lodde får anledning til å gyte.

Partene besluttet å åpne fiske i vinterperioden fra 1. januar – 30. april i 2003.

Totalkvote og fordeling mellom partene fremgår av Vedlegg 3.

Tekniske reguleringstiltak fremgår av Vedlegg 7.

Partene var enige om gjensidig adgang til hverandres soner for å kunne fiske sine kvoter fullt ut.

7. Spørsmål vedrørende forvaltning av norsk vårgytende sild i 2003

Partene var enige om at deres mål er å oppnå en multilateral løsning for forvaltningen av norsk vårgytende sild også for 2003.

Dersom det ikke foreligger en slik løsning til årsskiftet 2002/2003, vil partene imidlertid drøfte en midlertidig ordning slik at norsk og russisk fiske kan gjennomføres i tråd med tradisjonelt fiskemønster.

8. Regulering av fisket etter andre fiskeslag i 2003

Kvoter på andre bestander og tekniske reguleringstiltak fremgår av Vedlegg 6 og 7.

Partene var enige om at beskatning av fiskebestander som ikke er kvoteregulert, bare kan skje som bifangst ved fiske av kvoteregulerte fiskeslag. Partene var enige om gjensidige bifangstkvoter i hverandres økonomiske soner. Disse bifangstkvotene kan bli økt dersom hensynet til den praktiske avvikling av fisket tilsier det. Partene vil så snart som mulig behandle anmodninger om å øke bifangstkvotene.

8.1 Blåkveite

Partene var enige om å opprettholde forbudet om direkte fiske etter blåkveite i 2003.
Den norske part opplyste at det vil bli gjennomført et begrenset kystfiske i tradisjonelt omfang med konvensjonelle redskaper i områder under norsk fiskerijurisdiksjon.

Den russiske part informerte om at det vil bli gjennomført forsøksfiske etter blåkveite ved bruk av ulike fiskeredskaper i kystsonen av Barentshavet i områder under russisk jurisdiksjon.

For å oppnå bedre kunnskap om bestandens geografiske utbredelse i antall og biomasse for hver aldersgruppe fordelt gjennom året, har den norsk-russiske fiskerikommisjon igangsatt et treårig (2002–2004) felles forskningsprogram mellom PINRO og Havforskningsinstituttet, jfr. Vedlegg 10.

Tekniske reguleringstiltak fremgår av Vedlegg 7.

Partene gjorde seg kjent med nye opplysninger om artens grenseoverskridende karakter og ble enige om å fortsette diskusjonen om denne saken under den 32. sesjon i Den blandete norsk-russiske fiskerikommisjon.

8.2 Uer

Partene drøftet bestandssituasjonen for snabeluer (Sebastes mentella), og konstaterte at den er i særdeles dårlig forfatning, noe som vekker bekymring. De fant det nødvendig å skjerpe

reguleringene for denne bestanden. I sammenheng med dette vil den russiske part ikke drive fiske etter snabeluer (Sebastes mentella) i norsk økonomisk sone. Den norske part redegjorde for arbeidet med skjerpede regler for norsk fiske både etter snabeluer (Sebastes mentella) og vanlig uer (Sebastus marinus).

Tillatt bifangsprosent og tekniske reguleringstiltak fremgår av Vedlegg 6 og 7.

8.3 Sei

Partene viste til at en målrettet og rasjonell forvaltning av seibestanden de siste ti år har medført et høyere bestandsnivå og en større geografisk utbredelse av sei, også mot øst, herunder områder i russisk økonomisk sone.

Partene er enige om at Russland kan fastsette forvaltningstiltak for fiske og bifangst av sei i russisk økonomisk sone, og at den norske part informeres om slike tiltak.

Kvote og tekniske reguleringstiltak fremgår av Vedlegg 6 og 7.

9. Forvaltning av kamtsjatkakrabbe (Paralithodes camtschaticus) i Barentshavet i 2003

Partene utvekslet informasjon om resultatene av forskning på kamtsjatkakrabbe (Paralithodes camtschaticus) i Barentshavet og vedtok en felles rapport fra PINRO og Fiskeriforskning om resultatene fra forskningen i 2002.

Partene konstaterte at det var manglende kunnskap om det gjensidige forholdet mellom krabben og øvrige arter i økosystemet i Barentshavet. Partene ga forskerne fra begge land i oppdrag å utvide forskningen på dette området. Den norske part uttrykte bekymring for spredningen av kamtsjatkakrabben vestover fra krabbens kjerneområder i Barentshavet. Spredningen av kamtsjatkakrabbe i kystområdene påvirker de tradisjonelle kystfiskeriene. I sammenheng med dette har partene gitt forskere fra begge land i oppdrag å utarbeide et vitenskapelig grunnlag for etablering av en vestlig grense for krabbens utbredelse og utarbeide forslag til mulige tiltak for å begrense videre utbredelse til områder vest for denne grensen. I tillegg var partene enige om at den norske part skulle arrangere et symposium med fokus på introduserte arter i løpet av 1. halvår 2003, jfr. Vedlegg 10, punkt 4.

I henhold til det vedtatte beskatningsnivå for bestanden av kamtsjatkakrabbe i Barentshavet fastsatte partene mulig uttak av kamtsjatkakrabbebestanden for 2003 til inntil 600.000 individer i russisk økonomisk sone og inntil 200.000 individer i norsk økonomisk sone.

Partene bestemte at den nevnte mengde skal fanges som forskningsfangst, men den russiske part var enig i forslaget fra den norske part om at Norge fisker sin kvote gjennom utprøving av andre fangstregimer. Det skal leveres inn data fra denne fangsten til forskningsformål.

Tekniske reguleringstiltak fremgår av Vedlegg 7, punkt 10.

10. Regulering av fisket etter reker i 2003

Partene behandlet utviklingen i fisket og bestandssituasjonen for reker i Barentshavet. Partene var enige om at forskere fra de to land skal fortsette utvidete undersøkelser av rekebestanden og rekens biologi i Barentshavet. De konstaterte at norske og russiske forskere arbeider med en bestandsvurdering av reker, bl.a. med henblikk på mulig fastsettelse av TAC. Dette arbeidet omfatter torskens predasjon på rekebestanden.

Partene var enige om at det er nødvendig å få forskningen på reke bedre integrert med annen forvaltningsrettet forskning i området.

Norsk side uttalte ønske om at russisk side innfører for Russlands økonomiske sone et minstemål på 6 cm for reker (15 mm carapax) og med tillatt innblanding av 10% reker under minstemål i vekt i fangsten, som grunnlag for stengning av områder med for mye rekeyngel.

Partene var enige om at stenging av felt ved rekefiske skal gjennomføres på grunnlag av data om bifangst av blåkveite, torsk, hyse og uer.

Kvoter og tekniske reguleringstiltak fremgår av Vedlegg 6 og 7.

Partene ba forskerne om å se på mulighetene for videre utvikling av seleksjonsteknologi i fiskeredskap med sikte på å redusere innblanding av ueryngel i rekefisket.

11. Regulering av selfangsten i 2003

Kvoter og reguleringstiltak, herunder fangst for vitenskapelige formål, fremgår av Vedlegg 6 og 8.

Partene er bekymret over veksten i bestandene av grønlandssel, noe som har negativ innvirkning på tilstanden til de viktigste fiskebestandene i Barentshavet, og vil i den forbindelse vurdere mulige tiltak for økning av fangsten.

12. Forvaltningssamarbeid

Partene vil fortsette samarbeidet mellom de to lands fiskerimyndigheter for ytterligere å effektivisere ressurskontrollen og reguleringen av fisket.

Partene var enige om at alle norsk-russiske fellesprosjekter, også forskningsprosjekter, i forbindelse med utnyttelse av fellesbestander i Barentshavet og Norskehavet, skal behandles av Den blandete norsk-russiske fiskerikommisjon, og godkjennes av Det norske fiskeridepartement og Den russiske føderasjons statskomité for fiskerier. Hver part forplikter seg til å informere den annen part om hvilke kvoter som tildeles og mottas innenfor rammene av slike prosjekter, og om de kvanta fisk som landes i henhold til dette.

12.1 Rapport fra Det permanente utvalg for forvaltnings- og kontrollspørsmål på fiskerisektoren

Lederne for Det permanente utvalg redegjorde for arbeidet i utvalget.
Partene godkjente arbeidet utført av Det permanente utvalg.

Partene ga Det permanente utvalg i oppgave å fortsette arbeidet med forslag til et forenklet og elektronisk basert rapporteringssystem for fiskefartøy. Videre ble Det permanente utvalg gitt i oppgave å videreutvikle system for elektronisk utveksling av relevant informasjon på fartøynivå.

Partene vil legge forholdene til rette for fortsatt effektivt arbeid i Det permanente utvalg. Protokollen fra møtet i Det permanente utvalg i Murmansk 30. september - 5. oktober 2002 vedlegges (Vedlegg 9).

12.2 Forslag til grunnleggende prinsipper og kriterier for langsiktig, bærekraftig forvaltning av levende marine ressurser i Barentshavet og Norskehavet

Lederne for "arbeidsgruppen for beskatningsstrategier" redegjorde for arbeidet i gruppen og la frem forslag til "Grunnleggende prinsipper og kriterier for langsiktig, bærekraftig forvaltning av levende marine ressurser i Barentshavet og Norskehavet".

Partene sa seg meget tilfreds med arbeidsgruppens arbeid. Partene godkjente dokumentet "Grunnleggende prinsipper og kriterier for langsiktig, bærekraftig forvaltning av levende marine ressurser i Barentshavet og Norskehavet" (Vedlegg 11), i det de betrakter dette dokument som et viktig normativt grunnlag for en langsiktig strategi for bærekraftig forvaltning av de to landenes viktigste fiskebestander.

12.3 Erfaring med Memorandum om samarbeidsordninger mellom partenes kontrollmyndigheter

Partene var enige om at dette memorandumet tjener som et godt grunnlag for å bedre kontrollen og samarbeidet, og påpekte at det er nødvendig å videreføre arbeidet i samsvar med bestemmelsene i det.

12.4 Reglene for partenes utstedelse av lisenser for fiske og håndhevelse av fiskeribestemmelsene

Partene drøftet de rapporterings- og lisensieringsordninger som gjelder for partenes fiske i hverandres soner og håndhevelse av fiskeribestemmelsene, og konstaterte at de er fornøyde med gjeldende ordninger.

Partene bekreftet at de har til hensikt å beholde gjeldende lisensieringsordning for fiske i hverandres soner i 2003, herunder uten å utstede lisensdokument for hvert fartøy. I denne forbindelse påpekte de at partene har den forståelse at hver av partene vil treffe tilsvarende tiltak ved endring av ordningen.

Partene var enige om å utveksle informasjon om fartøyer som har til hensikt å fiske i de to landenes soner i 2003 innen 31. desember 2002, med bruk av samme lisenssøknadsskjema som i tidligere år.

12.5 Kontrolltiltak for fisket i Barentshavet i 2003

Partene bekreftet sin beslutning om å beholde streng kontroll med fisket i Barentshavet og drøftet konkrete kontrolltiltak.

12.6 Tredjelands fiske og gjennomføring av Avtale av 15. mai 1999 mellom Norge, Den russiske føderasjon og Island om visse samarbeidsforhold på fiskeriområdet

Partene utvekslet informasjon om gjennomføring av den trilaterale avtalen mellom Norge, Russland og Island, og konstaterte at avtalen har fungert etter sin hensikt.

Da ingen av partene har sagt opp avtalen, forlenges den ut 2006.

I forbindelse med en eventuell revisjon av avtalen eller de bilaterale protokoller, vil partene underrette hverandre offisielt og i god tid før fristen for underretning om revisjon som utløper 30. juni 2006.

Partene bekreftet sin enighet om at ved inngåelse av kvoteavtaler med tredjeland, skal tredjeland forplikte seg til å begrense sitt fiske til de kvoter som er tildelt av kyststatene, uavhengig av om fisket skjer i eller utenfor Norges og Russlands fiskerijurisdiksjonsområder.

Partene drøftet tredjelands fiske i Barentshavet og Norskehavet, og var enige om å videreføre aktiv kontroll med dette fisket slik at det kan bringes til opphør når de tildelte kvoter er oppfisket.

Partene bekreftet sin enighet om at reguleringstiltakene for bestanden av norsk-arktisk torsk gjelder i hele dens utbredelsesområde.

12.7 Felles omregningsfaktorer for fiskeprodukter

Partene var enige om at anvendelse av nøyaktige omregningsfaktorer er av avgjørende betydning for å få et sant bilde av ressursuttaket.

Partene var enige om å bruke felles omregningsfaktorer som angitt i Vedlegg 7.

Ved fastsettelse av omregningsfaktorer skal "Agreed methods for measurement and calculation of conversion factors" og den felles norsk-russiske arbeidsinstruks for måling og beregning av omregningsfaktorer for ferske fiskeprodukter produsert om bord i fiskefartøyer, benyttes.

Partene ga Det permanente utvalg i oppdrag å videreføre arbeidet med fastsettelse av nøyaktige omregningsfaktorer i samsvar med det man har blitt enige om, jfr. Protokoll fra møtet i Det permanente utvalg i Murmansk 30. september - 5. oktober 2002, Vedlegg 9.

12.8 Prosedyrer for stenging og åpning av fiskefelt

Partene var enige om å fortsette å anvende felles norsk-russisk ordning for stenging og åpning av fiskefelt for bunnfisk og reker.

13. Felles forskning på marine ressurser

Partene konstaterte med tilfredshet at forskningssamarbeidet mellom de to land utvikler seg på et kvalitativt nytt nivå der man anvender ulike moderne metoder og instrumenter for innsamling og bearbeiding av data om fellesbestandenes tilstand.

Partene presiserte at forskningstoktene som gjennomføres av hver av dem i den annen parts økonomiske sone, er det viktigste middel for å fremskaffe enhetlige grunnlagsdata for å utarbeide råd om forvaltningstiltak for fellesbestandene i Barents- og Norskehavet. Partene uttrykte derfor særdeles sterk bekymring i forbindelse med de vesentlige begrensninger som legges på norske fartøys adgang til russisk økonomisk sone, og som i inneværende år har medført begrensninger på russiske fartøyers adgang til norsk økonomisk sone. Det var enighet om at forskningsadgang til hverandres soner må være basert på gjensidighet.

Partene understreket spesielt at det er nødvendig å utvide innsamlingen av gjensidig utfyllende og gjensidig kontrollerbare data over hele utbredelsesområdet til fellesbestandene, slik at man kan skaffe til veie representative vurderinger av deres tilstand og utarbeide det vitenskapelige grunnlaget for TAC.

På bakgrunn av dette vil en videre begrensning av forskningsfartøyenes adgang til hverandres soner føre til at det eksisterende forvaltningssystemet for levende marine ressurser i Barents- og Norskehavet får svekket sin autoritet internasjonalt.

Partene vedtok program for felles norsk-russisk forskning på levende marine ressurser i 2003, jfr. Vedlegg 10.

Partene konstaterte at det er uunngåelig med et uttak av levende marine ressurser, herunder bifangst, under gjennomføringen av forskningstokt, bestandsovervåkning, innsamling av data for forvaltningsbeslutninger og andre forskningsformål.

Partene fastsatte fangstkvanta for alle arter for gjennomføring av forskningsarbeid på levende marine ressurser, bestandsovervåking og innsamling av data for å treffe forvaltningsbeslutninger. Hele fangsten for disse formål, inklusive bifangst, skal rapporteres på vedtatt statistikkskjema, jfr. punkt 4. Den russiske føderasjons fiskerikomite og Det norske Fiskeridepartement vil i god tid før toktstart utveksle informasjon om antall og navn på fartøy som skal delta i undersøkelser og overvåking av levende marine ressurser, tid for gjennomføring av disse og fangstkvanta, jfr. Vedlegg 10.

Partene vedtok å holde det 10. norsk-russiske symposium i Bergen, Norge 27. – 29. august 2003 under tittelen "Management strategies for commercial marine species in northern ecosystems". Det legges opp til deltakelse fra forskning, forvaltning og fiskerinæring.

14. Eventuelt

Partene viste til "Avtale av 1995 om gjennomføring av bestemmelsene i De forente nasjoners havrettskonvensjon av 10. desember 1982 om bevaring og forvaltning av vandrende fiskebestander og langtmigrerende fiskebestander" og påpekte at anvendelsen av bestemmelsene i denne avtalen kan reise enkelte spørsmål som har relevans for arbeidet i Den blandete norsk-russiske fiskerikommisjon. Partene var derfor enige om å drøfte denne saken nærmere på 32. sesjon i Den blandete norsk-russiske fiskerikommisjon.

Partene var enige om å avholde neste ordinære sesjon i Den blandete norsk-russiske fiskerikommisjon i Russland i oktober/november 2003.

Denne protokoll er utferdiget 8. november 2002 i Kabelvåg på norsk og russisk, med samme gyldighet for begge tekster.

Representant for Kongeriket Norges regjering i Den blandete norsk-russiske fiskerikommisjon

J. Krog

Representant for Den russiske føderasjons regjering i Den blandete russisk-norske fiskerikommisjon

A. Makojedov

VEDLEGG 1

I. Den norske delegasjon til den 31. sesjon i Den blandete norsk-russiske fiskerikommisjon, Kabelvåg, 4. - 8. november 2002

Jørn Krog	Norges representant i Den blandete norsk-russiske fiskeri-kommisjon, departementsråd, Fiskeridepartementet, delegasjonsleder
Peter Gullestad	Norges stedfortredende representant i Den blandete norsk-russiske fiskerikommisjon, fiskeridirektør, Fiskeridirektoratet, nestleder for delegasjonen
Kirsti Henriksen	Avdelingsdirektør, Fiskeridepartementet
Dag H. Nestegard	Informasjonsrådgiver, Fiskeridepartementet
Kjell Kristian Dørum	Rådgiver, Fiskeridepartementet
Else Marie Horn	Førstesekretær, Fiskeridepartementet
Jon Ramberg	Avdelingsdirektør, Utenriksdepartementet
Anne-Kristin Jørgensen	Fiskeriråd, Den norske ambassade i Moskva
Lisbeth Plassa	Avdelingsdirektør, Fiskeridirektoratet
Sigmund Engesæter	Avdelingsdirektør, Fiskeridirektoratet
Åsmund Bjordal	Forskningsdirektør, Havforskningsinstituttet
Kjell Nedreaas	Seksjonsleder, Havforskningsinstituttet
Ingolf Røttingen	Forsker, Havforskningsinstituttet
Tore Haug	Professor, Fiskeriforskning
Jan Sundet	Seniorforsker, Fiskeriforskning
Geir Knutson	Fylkesrådsleder, Nordland fylkeskommune
Reidar Nilsen	Leder, Norges Fiskarlag
Åge Remøy	1. nestleder, Norges Fiskarlag
Knut Werner Hansen	Landsstyremedlem, Norges Fiskarlag
Christen A. Mordal	Adm. direktør, FHL industri og eksport
Werner Kiil	Regionsekretær, Norsk Sjømannsforbund
Dag Klaastad	Tolk
Ingmund Fladaas	Tolk

VEDLEGG 1

II. Den russiske delegasjon til den 31. sesjon i Den blandete norsk-russiske fiskerikommisjon, Kabelvåg, 4. - 8. november 2002

Anatolij N. Makojedov	Den russiske føderasjons representant i Den blandete norsk-russiske fiskerikommisjon, viseformann i Den russiske føderasjons statskomité for fiskerier, delegasjonsleder
Sergej E. Djagilev	Sjef for vitenskapsavdelingen i Den russiske føderasjons statskomité for fiskerier
Valerij A. Krasnoslobodtsev	Seksjonssjef, Avdelingen for utenriksøkonomiske saker i Den russiske føderasjons statskomité for fiskerier
Nina G. Kim	Ledende spesialist i Fiskerikomitéens internasjonale avdeling
Aleksandr V. Zelentsov	Representant for Den russiske føderasjons statskomité for fiskerier i Norge
Vladimir M. Borisov	Laboratorieleder i VNIRO
Aleksandr I. Boltnev	Direktør for PINRO
Boris I. Berenbojm	Laboratorieleder, PINRO
Konstantin V. Drevetnjak	Seniorforsker, PINRO
Vladislav N. Svetotsjev	Laboriatorieleder, SevPINRO
Boris F. Pristsjepa	Direktør for Murmanrybvod
Sergej Ju. Baljabo	Seksjonsleder, Murmanrybvod
Vjatsjeslav I. Semenas	Direktør, Murmansk regionale overvåkingssenter
Ilja A. Gribkov	Utenriksministeriets representant
Vladimir S. Antipin	Representant for Den russiske føderasjons Grensevakttjeneste
Valerij A. Lulakov	Representant for Den russiske føderasjons Grensevakttjeneste
Gennadij D. Antropov	Leder av råstofftjenesten i "Rosrybakkolkhozsojuz" - Unionen av russiske fiskerikollektiver
Leon V. Lautsjis	Tolk
Sergej A. Sennikov	Tolk, PINRO
Jekaterina V. Belous	Tolk, PINRO

VEDLEGG 2
Dagsorden for den 31. sesjon i Den blandete norsk-russiske fiskerikommisjon, Kabelvåg 4.-8. november 2002

1. Åpning av sesjonen
2. Godkjenning av dagsorden
3. Arbeidsgrupper
4. Utveksling av fangststatistikk for 2001 og hittil i 2002
5. Regulering av fisket etter torsk og hyse i 2003
   - 5.1 Fastsettelse av totalkvoter og fordeling av kvoter
   - 5.2 Andre tiltak
   - 5.2.1 Tekniske reguleringer
6. Regulering av fisket etter lodde i 2003
7. Spørsmål vedrørende forvaltning av norsk vårgytende sild i 2003
8. Regulering av fisket etter andre fiskeslag i 2003
   - 8.1 Blåkveite
   - 8.2 Uer
   - 8.3 Sei
9. Forvaltning av kamtsjatkakrabbe (Paralithodes camtschaticus) i Barentshavet i 2003
10. Regulering av fisket etter reker i 2003
11. Regulering av selfangsten i 2003
12. Forvaltningssamarbeid
    - 12.1 Rapport fra Det permanente utvalg for forvaltnings- og kontrollspørsmål på fiskerisektoren
    - 12.2 Forslag til grunnleggende prinsipper og kriterier for langsiktig, bærekraftig forvaltning av levende marine ressurser i Barentshavet og Norskehavet
    - 12.3 Erfaring med Memorandum om samarbeidsordninger mellom partenes kontrollmyndigheter
    - 12.4 Reglene for partenes utstedelse av lisenser for fiske og håndhevelse av fiskeribestemmelsene
    - 12.5 Kontrolltiltak for fisket i Barentshavet i 2003
    - 12.6 Tredjelands fiske og gjennomføring av Avtale av 15. mai 1999 mellom Norge, Den russiske føderasjon og Island om visse samarbeidsforhold på fiskeriområdet
    - 12.7 Felles omregningsfaktorer for fiskeprodukter
    - 12.8 Prosedyrer for stenging og åpning av fiskefelt
13. Felles forskning på marine ressurser
14. Eventuelt
15. Avslutning av sesjonen

VEDLEGG 3

OVERSIKT OVER TOTALKVOTER OG FORDELING AV KVOTER MELLOM NORGE, RUSSLAND OG TREDJELAND (I TONN) I 2003

		TOTAL KVOTE			OVERFØRING	NASJONALE KVOTER	
	SUM	AVSETNING	KVOTEANDEL		FRA		
FISKESLAG	(TOTAL-KVOTER)	TIL TREDJELAND	NORGE	RUSSLAND	RUSSLAND TIL NORGE	NORGE	RUSSLAND
	I	II	III=(I-II)/2	IV=(I-II)/2	V	VI=III+V	VII=IV-V
TORSK	355.000	55.900	149.550	149.550	6.000	155.550	143.550
NORSK KYSTTORSK	40.000		40.000			40.000	
MURM.TORSK	40.000			40.000			40.000
SUM TORSK	435.000	55.900	189.550	189.550	6.000	195.550 [3]	183.550 [3]
HYSE	101.000	5.000	48.000	48.000	4.500	52.500	43.500
LODDE [1]	310.000		186.000	124.000 [2]		186.000	124.000

[1] Totalkvoten for lodde i Barentshavet fordeles med 60% til Norge og 40% til Russland.
[2] Av dette kan inntil 15.000 tonn disponeres til tredjeland
[3] 20.000 tonn disponeres til gjennomføring av forskning, overvåking og forvaltning, jfr. Vedlegg 10

VEDLEGG 4

I. FORDELING AV TREDJELANDSKVOTEN AV TORSK I 2003 (I TONN)

TOTALT	SVALBARD-OMRÅDET	NORGES ØK. SONE	RUSSLANDS ØK. SONE
55.900	15.800	23.300	16.800

II. FORDELING AV KVOTER FOR TORSK OG HYSE TIL TREDJELAND I PARTENES ØKONOMISKE SONER I 2003 (I TONN)

FISKESLAG	NORGES ØK. SONE	RUSSLANDS ØK. SONE	I ALT	HERAV I DET TILSTØTENDE OMRÅDE I BARENTSHAVET	
				NORGE	RUSSLAND
TORSK	23.300	16.800	40.100	16.800	16.800
HYSE	3.000	2.000	5.000	2.000	2000

VEDLEGG 5

KVOTER I 2003 FOR GJENSIDIG FANGST AV TORSK OG HYSE FOR NORGE OG RUSSLAND I DE TO LANDS ØKONOMISKE SONER (I TONN).

Disse kvotene gjelder ikke for et tilstøtende område for en felles fiskeriregulering i Barentshavet.

OMRÅDER	FISKESLAG		I ALT
	TORSK	HYSE	
NORGES KVOTER I RUSSLANDS ØKONOMISKE SONE	140.000	20.000	160.000
RUSSLANDS KVOTER I NORGES ØKONOMISKE SONE	140.000	20.000	160.000

VEDLEGG 6

I. KVOTER TIL RUSSLAND PÅ NORSKE BESTANDER I NORGES ØKONOMISKE SONE (I TONN) I 2003

BESTAND	KVOTE	MERKNADER
Vanlig uer Sebastes marinus Snabeluer Sebastes mentella	2.000	Bifangst, maksimum 20% i hver enkelt fangst.
Kolmule	50.000*	Kan fiskes i et nærmere avgrenset område i Norges økonomiske sone hvis koordinater vil bli presisert og i fiskerisonen ved Jan Mayen utenfor 4 n. mil
Sei	5.000	Bifangst ved fiske av torsk og hyse, maksimum 25% i hver enkelt fangst.
Steinbit	2.000	Direkte fiske og bifangst.
Andre bestander	3.000	Ikke kvoteregulerte bestander tatt som bifangst i fiske etter kvoteregulerte bestander.

*Kvoten av kolmule kan bli nedjustert avhengig av utfallet av drøftelser om forvaltningen av kolmule.

II. KVOTER TIL NORGE PÅ RUSSISKE BESTANDER I RUSSLANDS ØKONOMISKE SONE (I TONN) I 2003

BESTAND	KVOTE	MERKNADER
Reker	3.000	
Steinbit	1.500	Direkte fiske og bifangst.
Flyndre	1.000	Direkte fiske og bifangst.
Andre bestander	500	Ikke kvoteregulerte bestander tatt som bifangst i fiske etter kvoteregulerte bestander.
Grønlandssel	10.000 voksne dyr	Norsk fangst i Østisen. Ved fangst av årsunger balanseres ett voksent dyr med 2,5 unger.

VEDLEGG 7

TEKNISKE REGULERINGSTILTAK OG FELLES OMREGNINGSFAKTORER FOR FISKEPRODUKTER

I. TEKNISKE REGULERINGSTILTAK

1. Torsk og hyse

1.1 Det er påbudt å bruke sorteringsrist i torsketrål i nærmere avgrensede områder i Barentshavet. Bruk av rist skal skje i henhold til tekniske spesifikasjoner fastsatt av respektive myndigheter, basert på en minste spileavstand på 55 mm. Omforente spesifikasjoner for de to ristsystemene er utarbeidet.

Det er tillatt å bruke småmasket not eller duk-materiale i lede- og akterpanel i ristsystemene.

1.2 Det tillates innblanding av torsk og hyse under minstemål i et omfang av inntil 15% av det samlede antall i den enkelte fangst.

1.3 I tilfelle det i et fangstområde er mer enn 15% torsk og hyse i antall under fastsatte minstemål i fangstene, treffer hver av partene vedtak, på grunnlag av forskningsdata, om stengning av angjeldende område. Vedtak om stenging eller åpning av fiskefelt trer i kraft 7 dager etter at Partene har informert hverandre om vedtaket. Vedtaket om stenging og åpning trer i kraft straks for de to lands fartøy som mottar informasjon om vedtak direkte fra de ansvarlige myndigheter.

1.4 Det er forbudt å bruke flytetrål i torskefisket.

2. Lodde

2.1 Minstemålet for lodde er 11 cm. Det er tillatt å ha en innblanding på 10% (i antall) under minstemål.

2.2 Det tillates ikke bruk av trål eller not med en maskevidde mindre enn 16 mm. Det kan utvendig rundt trålposen brukes inntil tre forsterkningsnett med minste maskevidde på 80 mm. Partene tillater bruk av rundstroppe, og det er ikke begrensninger i antallet som kan benyttes.

2.3 For å hindre fangst av unglodde er det forbudt å fiske lodde nord for 74°N. På grunnlag av data fra forskningstokt kan denne grensen justeres.

2.4 For å hindre fangst under minstemål av andre arter i loddefisket skal partene, på grunnlag av forskningsdata, iverksette nødvendige tiltak i sine respektive soner. I denne forbindelse skal bifangst av fisk under minstemål av hver av artene torsk, hyse, sild og blåkveite ikke overskride 300 eksemplarer pr. tonn lodde. I tilfelle det i et fangstområde er høyere bifangster i loddefisket av torsk, hyse, sild og blåkveite enn anført ovenfor, skal hver av partene treffe vedtak om stengning av det aktuelle området. Vedtak om stenging eller åpning av fiskefelt trer i kraft 7 dager etter at Partene har informert hverandre om vedtaket. Vedtaket om stenging og åpning trer i

kraft straks for de to lands fartøy som mottar informasjon om vedtak direkte fra de ansvarlige myndigheter.

3. Sei

I fisket etter torsk og hyse er det tillatt å ha inntil 25% bifangst av sei i vekt av de enkelte fangster og av landet fangst.

4. Blåkveite

Ved fiske etter andre fiskeslag er det tillatt å ha inntil 12% bifangst av blåkveite i vekt av de enkelte fangster og inntil 7% om bord ved avslutning av fisket og av landet fangst.

5. Uer

5.1 I fisket etter andre fiskeslag er det tillatt å ha inntil 20% bifangst av uer i vekt av de enkelte fangster og av landet fangst.

6. Kolmule

Under fisket etter kolmule tillates en innblanding på inntil 10% makrell i den enkelte fangst.

7. Reker

7.1 Det er påbudt å bruke sorteringsrist i alt rekefiske i de to lands fiskerijurisdiksjons-områder.

7.2 Bifangst av torske- og hyseyngel i rekefisket skal ikke overskride 800 eksemplarer pr tonn reker. Bifangst av blåkveite skal ikke overskride 300 eksemplarer pr tonn reker. Bifangst av ueryngel skal ikke overskride 1000 eksemplarer pr tonn reker.

7.3 Ved stengning av felt på grunn av for stor innblanding av blåkveite eller yngel av torsk, hyse, og uer skal vedtak om stenging eller åpning av fiskefelt tre i kraft 7 dager etter at partene har informert hverandre om vedtaket.Vedtaket om stenging og åpning trer i kraft straks for de to lands fartøy som mottar informasjon om vedtak direkte fra de ansvarlige myndigheter.

8. Fangstdagbok

Innen utgangen av hvert døgn er det tillatt å korrigere opplysninger i fangstdagboken om angjeldende døgns fangst.

9. Bruk av instruks for kontroll av bruk av sorteringsrist i torsketrål

Ved kontroll av bruk av sorteringsrist i torsketrål skal kontrollmyndighetene anvende instruksen som er utarbeidet av Det permanente utvalg for fiskerispørsmål på fiskerisektoren, datert 16. september 1999.

10. Kamtsjatkakrabbe (Paralithodes camtschaticus)

10.1 Beskatningsgraden beregnes på basis av bestanden av hannkrabber over minstemål og skal være felles i de to lands økonomiske soner. En beskatningsgrad på inntil 20% av antall hannkrabber over minstemål kan tillates og sikrer stabil reproduksjon av bestanden i denne fasen.

10.2 Det er forbudt å drive fangst på hunnkrabber.

10.3 Minstemål for hannkrabber skal være større eller lik 132 mm carapaxlengde, noe som tilsvarer 150 mm carapaxbredde. Den norske part vil bruke carapax lengdemål og den russiske part carapax breddemål ved fastsettelse av minstemål.

10.4 Fangst av kamtsjatkakrabbe skal bare skje med teiner. Teinene skal utstyres med nett med minimum 70 mm maskevidde. Teinene skal utstyres med innretninger som hindrer muligheten for fortsatt krabbefangst i tilfelle teinene mistes.

10.5 Fangst av kamtsjatkakrabbe skal begrenses slik at det ikke er anledning til å drive fangst i perioder med skallskifte. Fangst tillates således bare i høst-/vinterperioden. Det bør i tillegg anbefales at fangst bare foregår når krabben har størst kommersiell kvalitet, og en vil anbefale at det blir foretatt forsøksfiske før fisket åpnes i de forskjellige områdene.

10.6 Minste tillatte dybde for fangst av kamtsjatkakrabbe settes til 100 meter og avgrensede områder kan vurderes stengt for krabbefiske ved for stor innblanding av hunnkrabbe og krabbe under minstemål.

II. FELLES OMREGNINGSFAKTORER FOR FISKEPRODUKTER

1. Torsk

Følgende felles omregningsfaktorer skal benyttes ved ressurskontroll og ved beregning av ressursuttak for norske, russiske og tredjelands fartøyer:

- sløyd med hode: faktor 1,18
- sløyd uten hode rundsnitt: faktor 1,50
- sløyd uten hode rettsnitt: faktor 1,55

For maskinprodusert filet:

- filet med skinn (med tykkfiskbein): faktor 2,60
- filet uten skinn (med tykkfiskbein): faktor 2,90
- filet uten skinn (uten tykkfiskbein): faktor 3,25

2. Hyse

Følgende felles omregningsfaktorer skal benyttes ved ressurskontroll og ved beregning av ressursuttak for norske, russiske og tredjelands fartøyer:

- sløyd med hode: faktor 1,14
- sløyd uten hode rundsnitt: faktor 1,40

Følgende felles midlertidige omregningsfaktorer skal benyttes
ved ressurskontroll og ved beregning av ressursuttak
for norske, russiske og tredjelands fartøyer:

- sløyd uten hode uten ørebein:	faktor 1,65

For maskinprodusert filet:

- filet med skinn (med bein):	faktor 2,65
- filet uten skinn (med bein):	faktor 2,95
- filet uten skinn (uten bein):	faktor 3,15

VEDLEGG 8

THE 31ST SESSION OF THE JOINT NORWEGIAN - RUSSIAN FISHERIES COMMISSION, KABELVÅG, LOFOTEN, NORWAY 4 - 8 NOVEMBER 2002

REPORT OF THE WORKING GROUP ON SEALS

Participants:

RUSSIA		
	V. SVETOCHEV	SevPINRO, Archangelsk
	G. ANTROPOV	Rosribkolhozsojus, Moscow
	A. I. BOLTNEV	PINRO, Murmansk*
	L.A. LAUTSJIS	Interpreter
NORWAY		
	T. HAUG	Norwegian Institute of Fisheries and Aquaculture, Tromsø
	K.W. HANSEN	Norwegian Fisherman's Association, Tromsø*
	K. HENRIKSEN	Norwegian Ministry of Fisheries, Oslo
	W. KIIL	Trade Union for Fishermen, Tromsø
	C. MORDAL	Federation of Norwegian Fishing Industry, Oslo
	R. NILSEN	Norwegian Fisherman's Association, Trondheim*

*Participated in part of the meeting

Contents:

1. EXCHANGE OF INFORMATION AND SUMMARY OF SEAL CATCHES IN 2002

Norwegian catches were taken by three vessels in the Greenland Sea and one vessel in the southeastern Barents Sea. For logistical reasons, Russian seal vessels did not carry out hunting in the Greenland Sea in 2002. Russian catches of harp seals in the White Sea were taken by local hunters using helicopters.

The recommended 2002 TACs for Greenland Sea hooded seals was 10,300 one year old and older (1yr+) animals or an equivalent number of pups - if a harvest scenario including both 1yr+ animals and pups were chosen, one 1yr+ animal should be balanced by 1.5 pups. For the Greenland Sea harp seals, the 2002 TAC was recommended at 15,000 1yr+ animals or an equivalent number of pups (where one 1yr+ animal should be balanced by 2 pups). The 2002 TAC recommended for harp seals in the Barents Sea and White Sea was defined at 53,000 1yr+ animals or an equivalent number of pups where one 1yr+ animal should be balanced by 2.5 pups. Norway was allocated a quota of 5000 1yr+ animals (with a similar equivalence between 1yr+ animals and pups). All 2002 seal quotas followed the recommendations given by the ICES Advisory Committee on Fisheries Management (ACFM).

Norwegian and Russian catches in 2002, including catches under permits for scientific purposes, are summarized in the table below:

Area/species	Norway	Russia	Sum
GREENLAND SEA			
Harp seals			
Pups	1118[1]	0	1118
Older seals (1yr+)	114	0	114
Sum	1232	0	1232
Hooded seals			
Pups	6456[2]	0	6456
Older seals (1yr+)	735[3]	0	735
Sum	7191	0	7191
Area subtotal	8423	0	8423
BARENTS SEA / WHITE SEA			
Harp seals			
Pups	411	34187	34598
Older seals (1yr+)	1937	0	1937
Sum	2348	34187	36535
Area subtotal	2348	34187	36535
TOTAL CATCHES	10771	34187	44958

[1] Including 5 pups taken under permit for scientific purposes
[2] Including 4 pups taken under permit for scientific purposes
[3] Including 71 1yr+ animals taken under permit for scientific purposes

Incidental catches of 12 harp seals were reported from the Norwegian coast in 2002.

2. EXCHANGE OF INFORMATION AND SUMMARY REPORTS OF RESEARCH ACTIVITIES IN 2002

2.1 Norwegian research

2.1.1 Estimation of pup production – Greenland Sea harp seals

Due to uncertainties in the assumptions required when estimating abundance from catch-at-age data, sequential population models and mark-recapture data, independent estimates of pup production have been recommended and used to determine population size of harp and hooded seals both in the northwest Atlantic, in the Greenland Sea, and in the White Sea. The status of the stocks are subsequently assessed by fitting population models to the independent estimates of pup production. It is recommended that the comprehensive aerial surveys needed to provide estimates of current pup production should be conducted periodically, and that efforts should be made to ensure comparability of survey results. In the Greenland Sea, harp and hooded seals were surveyed aerially in 1991 and 1997, respectively. Although not formally established, it has been argued that the period between surveys should not exceed 4-5 years. For this reason, new aerial surveys to asssess the status of the Greenland Sea population of harp seals and, if possible, hooded seals during their whelping period (March-April) were conducted in 2002. During field work, which included participation of Canadian scientist with substantial experience from similar surveys in the Northwest Atlantic, it soon became evident that logistical restrictions in combination with unusually scattered and wide distribution of the hooded seal pups made it impossible to survey both species simultaneously. Therefore, the survey, which took place during the period 14 March to 6 April, focussed on harp seals.

One fixed-wing twin-engined aircraft (stationed in Scoresbysound, Greenland, but permitted also to use the Jan Mayen island as base) was used for reconaissance flights and photographic surveys along transects over the whelping patches once they had been located and identified. A helicopter, stationed on and operated from the applied research vessel (R/V"Lance"), assisted in the reconnaissance flights, and subsequently flew visual transect surveys over the whelping patches. The helicopter was also used for other purposes, such as age-stageing (also performed along transects over the patches) of the pups to assess the temporal distribution of births. Three harp seal breeding patches (A, B and C) were located. Systematic visual strip transect surveys were flown over harp seal Patch A (20 March) and patch B (28 March), whereas photographic strip transect survey were flown over patches B and C on 29 March and 6 April, respectively. Subsequent analyses of images from the photographic surveys are still in progress. These analyses include participation of Canadian and Russian scientific personell with experiene from similar analyses from harp seal surveys in the northwest Atlantic and White Sea, repectively. The results from the aerial surveys will be used to estimate the total 2002 harp seal pup production. Subsequently, the status of the stock will be assessed by fitting population models to the pup production estimate.

2.1.2 Ecological role – Greenland Sea harp and hooded seals

To enable an assessment of the ecological role of harp and hooded seals throughout their distributional range of the Nordic Seas (Iceland, Norwegian, Greenland Seas), a project was initiated in 1999 by members of the NAMMCO Scientific Comittee. The project pays special attention to the period July-February (i.e., between moulting and breeding), which is known to be the most intensive feeding period for both harp and hooded seals. To provide data, seals were collected for scientific purposes on expeditions with R/V"Jan Mayen", conducted in the pack ice belt east of Greenland in September/October 1999 (autumn), July/August in 2000 (summer), and February/March in 2001 (winter). Results from analyses of stomach and intestinal contents from captured seals revealed that the diet of both species in this particular habitat were comprised of relatively few prey taxa. Pelagic amphipods of the genus *Parathemisto* (most probably almost exclusively *P. libellula*), the squid *Gonatus fabricii,* the polar cod *Boreogadus saida,* the capelin *Mallotus villosus*, and sand eels *Ammodytes* spp were particularly important. Although their relative contribution to the diet varied both with species and sampling period/area, these five prey items constituted 63-99% of the observed diet biomass in both seal species, irrespective of sampling period. For the hooded seals, *G. fabricii* was the most important food item in autumn and winter, whereas the observed summer diet was dominated by polar cod, however with important contribution also from *G. fabricii* and sand eels. The latter was observed on the hooded seal menu only during the summer period, while polar cod, which contributed importantly also during the autumn survey, was almost absent from the winter samples. During the latter survey, also capelin contributed to the hooded seal diet. *Parathemisto* was most important for the harp seals during summer and autumn, whereas in winter the contribution from krill, capelin, and some other fish species were comparable and even larger. Harp seals appeared to consume some *G. fabricii* at all sampling periods, whereas polar cod, taken mainly in summer and autumn, was replaced by capelin and other fish species on their menu in winter. A final survey within the framework of the project was conducted using R/V"Jan Mayen" in pack ice waters off the east coast of Greenland in September-October 2002. Additional to the dedicated surveys, samples for the project have been obtained from local hunters operating on the east coast of Greenland and from animals taken in bycatches and hunt in Icelandic waters.

2.1.3 Sampling from the commercial hunt

In 2002, sampling of demographic data from harp seal 1yr+ animals taken in commercial catches was performed on the Norwegian vessel operating in the southeastern Barents Sea. The Working Group **recommend** that routine collection of biological material from pups and older seals taken in commercial catches continues also in the future. The material from both the West and East Ice should also include reproductive organs such that present reproductive status of the stocks can be assessed.

2.1.4 Tagging with satellite tags

A satellite tag experiment was initiated in June 1999 when satellite tags were deployed on 11 moulted harp seals in the Scoresby Sound area on the east coast of Greenland. The results from these experiments are now being analysed, and are due to be published in 2003.

2.2 Russian research

2.2.1 Estimation of pup production of harp seals in the White Sea

During the 1997 and 1998 meetings of The Joint ICES/NAFO Working Group on Harp and Hooded seals (WGHARP), it was noticed and appreciated that Russian scientists had made substantial efforts to obtain reliable pup production estimates for the White and Barents Sea stock of harp seals. As also stated in the 1998 report, WGHARP looked forward to see progress in this Russian work, including experimentation with the isohaline method as well as further analyses of the 1998 photographic survey data. In March 2000, Russian scientists conducted two fully independent surveys of the breeding lairs in the White Sea: one with helicopter and one with aeroplane. The results from these surveys were presented to the 2000 meeting of WGHARP. Using the strip transect method, a mean uncorrected estimate of pups of 322,474 (SE=28,706), including pups harvested prior to the survey (30,729 pups), was obtained in the helicopåter surveys. These results are now being prepared for international publication. In the aeroplane survey, an uncorrected pup production estimate of 339,710 (SE=32,400), which includes pups harvested prior to the survey (30,729 pups), was obtained. The Russian results were accepted and acknowledged by WGHARP in the October 2000 meeting of the group. The present Working Group also **commend** the high quality of the Russian research in both the aeroplane and helicopter surveys and encouraged them to fulfill the analyses and to complete the publication process of the final results in an international scientific journal. The estimates from both the 2000 surveys confirm the 1998 estimate, and give strong evidence of a harp seal pup production of at least 300,000 in the White Sea.

2.2.2 Harp seal breeding in the White Sea in 2002

Studies of the White Sea harp seal breeding period were conducted from February 27 to March 12 and from March 22 to March 29 in 2002. In total 2064 pups were checked for sexual ratio, which was close to 1:1. On February 27 about 51 % of pups were 1-2 days old (n=31). By March 2 the fraction of this age group was maintained on 54 % (n=226), up to March 5 this parameter was diminished to 25 % (n=193), by March 9 – it was down to 8.4 % and on March 12 it was less than 2 %. Average pup body weight on February 27 was 11,9±0,29 kg (n=31). On March 2 the body weight was 12,2±0,15 kg (n=226), on March 5 it had increased to 16,1±0,36 kg (n=193), up to March 9 – to 18,5±0,45 kg (n=191) and on March 12 the average pup weight had reached 25,3±0,45 kg (n=191). Apparently, the harp seal whelping in the White Sea in 2002 compared well with the observations made in 2000 and 2001.

The distribution of seals and drift of the whelping ice were also investigated in the White Sea in 2002. It was established that both the terms of whelping and development of body condition in ragged jacket pups corresponded to similar measurements made in recent years. The average weight of harp seal pups caught on ice during the period from March 22 till March 29, was 34,2±0,3 kg (n=317) for ragged jacket pups and 34,6±0,4 kg (n=221) for beaters.

General distribution and drift of harp seal breeding patches within the White Sea in 2002 was

similar to the situation in 2001. In May 2002 an expedition was organised in the Kandalaksha Bay to investigate whether an abundance of post-moulted pups, similar to the one observed in 1998 and 2001, could be observed. Evidently, no abundance of pups was not noted in this area in 2002. Collection of data from local fishermen in the spring - summer period did not confirm mass mortality of harp seal pups (similar to the 2001 situation) during the 2002 season. Only a few cases of dead beaters, entangled in fishing gears, were observed.

2.3. Joint Norwegian-Russian work

2.3.1 Studies of reproduction

Trends in mean age at sexual maturity (MAM) were analysed for the Greenland Sea and Barents/White Sea stocks of harp seals based on data series collected by Russian and Norwegian scientists from the early 1960s to the early 1990s. Together with historical data on length at age, values of MAM are used as indicators of per capita resource levels in the two stocks of Northeast Atlantic harp seals. There was no long term trends in the Greenland Sea data set: A common MAM of 5.6 years could be fitted to data from 1959-90 and there were no significant differences in length at age of moulting females between samples collected in 1964 and 1987. For Barents Sea/White Sea harp seals, MAM increased significantly from 5.4 years in the period 1962-72 to 8.2 years in the period 1988-1993 concurrently with a decline in body growth rates found in earlier studies. The results indicate stock specific differences in per capita resource levels for maturing females, which might be related to different trends in stock abundance or density independent changes in habitat quality for the two stocks. The results from these analyses were presented at the meeting in WGHARP in October 2000, and the data were used in the stock assessments.

2.3.2 Abundance estimation

On several occasions WGHARP has discussed the possibilities and undisputable advantages involved in exchange of scientists between the "harp-and-hooded-seal-counting" countries during each others field work and subsequent analyses, discussions and presentations of results. This would ensure standardisation of both the field- and analytical methods involved. For this reason Norwegian scientists patrticipated in the 2000 aerial surveys in the White Sea, and have also taken part in the subsequent analyses and presentations of the data. Furthermore, one Russian expert has participated in the analyses of material collected during the Norwegian 2002 aerial surveys in the Greenland Sea.

2.3.3 Tagging with satellite tags

Analysis of 1995-1997 data collected from satellite tags deployed on harp seals in the White Sea as part of a joint Norway-Russian research program, continues and is assumed to result in a joint publication in 2003. The Working Group **recommends** to continue experiments with satellite tags on harp seals in the White Sea / Barents Sea.

2.3.4 Harp seal / capelin overlap

In September 2001, Norwegian and Russian scientists performed an aerial survey, using an especially designed Russian aeroplane, in the northeastern Barents Sea. The main aim of this survey was to assess whether there was an overlap in distribution, and thus potential predation, between harp seals and capelin at this time of the year. The personell in the plane cooperated with Norwegian and Russian research vessels which assessed the distribution and abundance of capelin in the area simultaneous with the aerial survey. Difficult weather conditions made it impossible to cover the entire distributional area of capelin with aerial surveys, e.g., the northmost areas with largest capelin abundance could not be covered with the aeroplane. Observations made from the ships indicated considerable abundance of harp seals in the key areas for capelin, whereas aerial surveys further south (where capelin abundance were lower) yielded no harp seal observations. New combined aerial-shipborne surveys, aimed to assess the harp seal / capelin overlap more synoptically, were conducted in September-October 2002. The results from these are now being analysed. Increased effort to assess the ecological role of harp seals in the Barents Sea in the future is **recommended** by the Working Group.

3. STATUS OF STOCKS AND MANAGEMENT ADVICE FOR 2003+

WGHARP met in the ICES headquarters, Copenhagen, Denmark, 2-6 October 2000 to assess the stocks of Greenland Sea harp seals, White Sea / Barents Sea harp seals and Greenland Sea hooded seals. New information about pup production was available, and enabled WGHARP to perfrom modelling which provided ACFM with sufficient information to give advice on both status and catch potential for all the three mentioned seal stocks in the meeting in Copenhagen, Denmark, 24 October – 2 November 2000.

Management agencies have requested advice on "sustainable" yields for these stocks. ACFM notes that the use of "sustainable" in this context is not identical to its interpretation of "sustainable" applied in advice on fish and invertebrate stocks. "Sustainable catch" as used in the yield estimates for seals means the catch that is risk neutral with regard to maintaining the population at its current size. As illustrated by the lower confidence interval obtained in the analyses, when "sustainable" catches are removed annually, the stock in 10 years may be lower by sometimes as much as 50%, compared to size of the stock at present. The stock may also be as much as 50% larger. The crucial point is even at the lower confidence bound the population is so large that its future viability has not been impacted.

The population assessments were based on a population dynamics model that estimates the development of future population size, for which statistical uncertainty is provided for each set of catch options. The age structure of the model was restricted to two age classes, 0 (pups) and 1+(one year old or older), because of limited information on catch at age and age structure for the populations in question, and because of the fact that catches were rather small compared to

population size for the years for which catch at age is known. The model requires estimates of mortality and reproductive parameters that include variance. Using the historical catch data and estimates of pup production, the model estimates mortality (M_0 and M_{1+}) and a birth rate within the 1+ population of females (f). The freedom with which the model can estimate these parameters is dependent upon the standard deviations provided. The model is fitted to pup production estimates weighted inversely to their variance in cases where more than one estimate are available.

The possibility of including multiple pup production estimates in the assessment model is an improvement from previously used estimation programs. However, models of this nature do not estimate parameters well when pup production estimates are from a limited period in time compared to generation time. The model has the option to allow estimation of population size and sustainable catch, but when given no prior information about M_{1+} and f, the model treats these parameters as independent parameters. To stabilize the model, the range of these parameters had to be constrained. As a result, the estimates of uncertainty may be negatively biased, and the confidence intervals for future population sizes may be too narrow.

The advice given by ACFM in 2000 was used by this Working Group on Seals to establish management advice both for 2001 and 2002 to the Joint Norwegian-Russian Fisheries Commission. In 2001 and 2002, WGHARP only met by correspondence, and will not meet physically until 1-5 September 2003 when a meeting is scheduled in Archangelsk, Russia. For this reason, there is no new advice from ACFM, and the Working Group **recommend** that the management advice given for 2001 is prolonged to apply also for the 2003 sealing season.

3.1. Greenland Sea

The Working Group **recommends** the following opening dates for the 2003 catch season: 1) Sucling pups, opening date of 18 March (0700 GMT) for catches of pups of both harp and hooded seals; 2) weaned pups, opening dates 20 March for hooded seals and 1 April for harp seals; 3) seals aged 1 yr and older (1yr+), opening date 22 March for hooded seals and between 1 and 10 April for harp seals. Adult hooded seal males should be permitted taken from 18 March .The Group recommends a closing date set at 30 June (2400 GMT) for harp seals and 10 July (2400 GMT) for hooded seals in 2003. Exceptions on opening and closing terms may be made in case of unfavourable weather or ice conditions. If, for any reason, catches of pups are not permitted, quotas can be filled by hunting moulting seals.

The Working Group agreed that the ban on killing adult females in the breeding lairs should be maintained for both harp and hooded seals in 2003.

3.1.1 Hooded seals

The Working Group noted the conclusion from ACFM that the stock is within safe biological limits, and that recent removals have been well below the recommended sustainable yields. Between 1991 and 2001 less than 30% of the quota was taken each year, whereas the catches

taken in 2002 constituted 49% of the total quota.

The population model solves for a constant exploitation that stabilise the 1+ population. Inputs to the model were:

Pup production estimate: Results from a Norwegian aerial survey in 1997 which resulted in estimates of pup production in the Greenland Sea of 23 762 pups (95% C.I. 14 819 to 32 705). This estimate is considered to be negatively biased since it was not corrected for the temporal distribution of births or for scattered pups. The actual number of pups produced in 1997 could, therefore, be larger.

Natural mortality: $M_{1+} = 0.1$, sd.=0.015 (the M_{1+} value is similar to what has been used in recent assessments of the stock while the standard deviation is based on the assumption that M_{1+} should be bounded by the assumed interval 0.07 - 0.13).

Pup mortality: $M_0 = 3M_{1+}$ (fixed).

Age specific pregnancy rates: asp(3)=0.028, asp(4) = 0.262, asp(5) = 0.504, asp(6) = 0.734, asp(7)=0.802, asp(8)=0.802, asp(9)=0.850, asp(10)= 0.908, asp(11)=0.97 (fixed).

Based on this input, the model estimated the following 2000 abundance for Greenland Sea hooded seals:

Parameter	Estimate	95% C.I.
1+ population in 2000	102 000	57 000 – 147 000
Pup production in 2000	28 100	16 000 – 40 000
M_{1+}	0.12	0.09 – 0.15
M_0/M_{1+}	3	Fixed
f (birth rate for 1+ females)	0.66	Fixed

ACFM gave **catch options** for two different scenarios: current catch level (average of the catches in the period 1996 – 2000) and sustainable yield. The sustainable catches were defined as the (fixed) annual catches that stabilise the future 1+ population. The catch options were further expanded using different proportions of pups and 1+ animals in the catches.

As a measure of the future development of the estimated population, a quantity that related future (2010) with current (2000) 1+ population, was used:

$$D_{1+} = \frac{N_{2010,1+}}{N_{2000,1+}}.$$

Option #	M_0 / M_{1+}	Catch level	Proportion of 1+ in catches	Pup catch	1+ catch	D_{1+}	Lower 95% C.I. for D_{1+}	Upper 95% C.I. for D_{1+}
1	3	Current	16% (current level)	2800	500	1.89	1.07	2.72
2	3	Current	100%	0	3300	1.79	0.95	2.62
3	3	Sustainable	16%	12200	2300	1.00	0.14	1.87
4	**3**	**Sustainable**	**100%**	**0**	**10300**	**1.00**	**0.10**	**1.90**

ACFM emphasized that a catch of 10,300 1+ animals (catch option 4), or an equivalent number of pups, in 2001 would be sustainable. The Working Group **recommend** that this advice be used as a basis for the determination of a TAC for hooded seals in the Greenland Sea also in 2003: **10,300 1+ animals or an equivalent number of pups. If a harvest scenario including both 1+ animals and pups is chosen, one 1+ seal should be balanced by 1.5 pups.**

3.1.2 Harp seals

The Working Group noted the conclusion by ACFM that the stock is within safe biological limits, and that recent removals have been well below the recommended sustainable yields.

The model solves for a constant exploitation which stabilise the 1+ population. Inputs to the model were:
Pup production estimates (from previous tag-recapure experiments):

Year	Pup production estimates	c.v.
1983	58539	.104
1984	103250	.147
1985	111084	.199
1987	49970	.076
1988	58697	.184
1989	110614	.077
1990	55625	.077
1991	67271	.082

Natural mortality: $M_{1+} = 0.11$, sd.=0.03 (a standard deviation of .03 means that one effectively considers values of M_{1+} in the range from 0.05 to 0.17).
Pup mortality: $M_0 = 3M_{1+}$, sd.=1.
Age at maturity ogive: p(3) = 0.058, p(4) = 0.292 p(5) = 0.554, p(6)=0.744, p(7)=0.861, p(8)=0.926, p(9)= 0.961, p(10)=0.980, p(11)=0.990, p(12)=0.995, p(13)=0.997, p(14)=0.999, p(15)=0.999
Pregnancy rate for mature females: F=0.833, sd.=0.02.

Based on this input, the model estimated the following 2000 abundance for Greenland Sea harp seals:

Parameter	Estimate	95% C.I.
1+ population in 2000	361 000	210 000 – 629 000
Pup production in 2000	76 700	48 000 – 105 000
M_{1+}	0.12	0.09 – 0.15
M_0/ M_{1+}	3.10	1.26 – 4.95
f (birth rate for 1+ females)	0.50	0.38 – 0.61

ACFM gave **catch options** for two different catch scenarios: current catch level (average of the catches in the period 1996 – 2000) and sustainable yield. The sustainable catches were defined as the (fixed) annual catches that stabilised the future 1+ population. The catch options were further

expanded using different proportions of pups and 1+ animals in the catches.

As a measure of the future development of the estimated population, a quantity that related future (2010) with current (2000) 1+ population, was used:

$$D_{1+} = \frac{N_{2010,1+}}{N_{2000,1+}}.$$

Opt. #	Catch level	Proportion of 1+ in catches	Pup catch	1+ catch	D_{1+}	Lower 95% C.I for D_{1+}	Upper 95% C.I for D_{1+}
1	Current	14% (1996-1999 level)	3600	600	1.31	0.88	1.75
2	Current	51% (2000 level)	2000	2200	1.30	0.86	1.74
3	Current	100%	0	4200	1.28	0.84	1.72
4	Sustainable	14%	17600	2900	1.00	0.52	1.49
5	Sustainable	51%	8500	9000	1.01	0.51	1.50
6	**Sustainable**	**100%**	**0**	**15000**	**1.00**	**0.50**	**1.50**

ACFM emphasized that a catch of 15,000 1+ animals (catch option 6), or an equivalent number of pups, in 2001 would be sustainable. The Working Group **recommend** that this advice be used as a basis for the determination of a TAC for harp seals in the Greenland Sea also in 2003: **15,000 1+ animals or an equivalent number of pups. If a harvest scenario including both 1+ animals and pups is chosen, one 1+ seal should be balanced by 2 pups.**

3.2 The Barents Sea / White Sea

The Working Group **recommends** the following terms concerning opening and closing dates and areas of the catches: From 28 February to 20 April for Russian coastal catches and from 23 March to 20 April for Norwegian and Russian sealing ships. However, it is proposed that, in the case of difficult weather or ice conditions, the harvesting can be prolonged till 10 May. Exceptions from opening and closing dates should be made, if necessary, for scientific purposes. The Norwegian participants in the Working Group suggest to prolong dates of harvesting to 1 July, and to determine the operational areas for the Norwegian catch activities to be the southeastern Barents Sea to the east of 20°E.

The Working Group agreed that the ban on killing adult harp seal females in the breeding lairs should be maintained in 2003.

3.2.1. Harp seal.

The Working Group noted the conclusion of ACFM that the stock is within safe biological limits, that numbers are estimated to be increasing, that catches through the 1990s have been below quotas, and that there is some evidence that densities may be so high that biological processes like rate of maturation may be showing density dependent effects.

The population model solves for a constant exploitation that stabilise the 1+ population. Inputs to the model were:
Pup production estimate: Russian airplane and helicopter surveys of White Sea harp seal pups were conducted in March 1998 and 2000 using traditional strip transect methodology and multiple sensors. Black and white, ultraviolet and thermal infra-red scanners were operated during the surveys. The estimates are considered to be negatively biased since they were not corrected for pups which may be hidden from the camera or for pups missed by the readers. Furthermore, the survey estimates were not corrected for the temporal distributions of birth. Therefore, actual pup production may be higher than the estimates presented below:

Year	Pup production estimate	c.v.
1998	286 260	.073
2000	322 474	.089
2000	339 710	.095

Natural mortality: $M_{1+} = 0.1$, sd.=0.015 (the M_{1+} -value is similar to what has been used in recent assessments of the stock while the standard deviation is based on the assumption that M_{1+} should be bounded by the assumed interval 0.07 - 0.13)
Pup mortality: $M_0 = 3M_{1+}$ (fixed) and $M_0 = 5M_{1+}$ (fixed)
Age at maturity ogive: p(5) = 0.1, p(6) = 0.18, p(7) = 0.35, p(8)=0.6, p(9)=0.7, p(10)=0.94, p(11)= 1.0
Pregnancy rate: F=0.84, no standard deviation.

There are reports that pup mortality rates may vary substantially in the White Sea region, and that in recent years these rates have been very high. For this reason, the 2000 abundance of White Sea / Barents Sea harp seals were estimated under two different assumptions about the ratio M_0/ M_{1+}:

Parameter	Estimate	95% CI
$M_0/ M_{1+} = 3.0$		
1+ population in 2000	1 727 000	1 550 000 – 1 910 000
Pup production	319 000	286 000 – 351 000
M_{1+}	0.10	0.07 – 0.12
M_0/ M_{1+}	3.0	Fixed
F (birth rate for 1+ females)	0.42	Fixed
$M_0/ M_{1+} = 5.0$		
1+ population in 2000	1 676 300	1 500 000 – 1 850 000
Pup production	314 000	283 000 – 346 000
M_{1+}	0.09	0.07 – 0.11
M_0/ M_{1+}	5.0	Fixed
F (birth rate for 1+ females)	0.42	Fixed

ACFM gave **catch options** for two different catch scenarios: current catch level (average of the

catches in the period 1996 – 2000) and sustainable yield. The sustainable catches were defined as the (fixed) annual catches that stabilised the future 1+ population. These were calculated under the assumptions that the ratio M_0/ M_{1+} was either 3 or 5. The catch options were further expanded using different proportions of pups and 1+ animals in the catches.

As a measure of the future development of the estimated population, a quantity that related future (2010) with current (2000) 1+ population, was used:

$$D_{1+} = \frac{N_{2010,1+}}{N_{2000,1+}}.$$

Option #	M_0 / M_{1+}	Catch level	Proportion of 1+ in catches	Pup catch	1+ catch	D_{1+}	Lower 95% C.I. for D_{1+}	Upper 95% C.I. for D_{1+}
1	5	Current	12.5% (current level)	35000	5000	1.16	0.80	1.52
2	5	Current	100%	0	40000	1.09	0.73	1.45
3	3	Sustainable	12.5%	95000	14000	1.02	0.62	1.42
4	3	Sustainable	100%	0	82000	1.02	0.61	1.45
5	5	Sustainable	12.5%	69100	9900	1.02	0.68	1.35
6	**5**	**Sustainable**	**100%**	**0**	**53000**	**1.01**	**0.66**	**1.37**

Given recent reports of possible high pup mortality rates, ACFM recommended that managers consider the higher pup mortality options (catch options 5 and 6) when setting catch quotas, and concluded that a catch of 53 000 1+ animals, or an equivalent number of pups in 2001, would be sustainable. The Working Group **recommend** that this advice be used as a basis for the determination of a TAC for harp seals in the Barents Sea / White Sea also in 2003:
53,000 1+ animals or an equivalent number of pups. If a harvest scenario including both 1+ animals and pups is chosen, one 1+ seal should be balanced by 2.5 pups.

3.2.2 Other species

The Working Group agreed that commercial hunt of bearded seals should be banned in 2003, as in previous years, but it **recommend** to start catch under permit for scientific purposes to investigate results of long time protection.

3.3 Management goals for harp and hooded seal stocks in the Northeast Atlantic

Based on a request from the Joint Norwegian-Russian Fisheries Commission, WGHARP discussed B_{lim}, B_{msy} and other reference points, and their applicability considered in the management of NE Atlantic harp and hooded seals, at the October 2000 meeting in Copenhagen. From the input given from WGHARP, ACFM responded to this request by stating that the biological reference points could not be established before managers had specified goals for the management of seals more clearly. The ACFM advice on harp and hooded seals for 2001 were

given in "replacement yields" corresponding to a management strategy aiming at maintaining the seal populations at its current levels.

At the 29th Session of The Joint Norwegian-Russian Fisheries Commission in Tromsø 14-17 November 2000 the parties discussed the goals of seal management in the Northeast Atlantic. The parties concluded that the aim of management is not to keep the seal stocks at its current levels, but to harvest the seal stocks sustainable without risking stock collapse. Against this background, the previous request to ACFM was reiterated, and ACFM was asked to assess and establish the biological limits for Greenland Sea harp seals, Greenland Sea hooded seals and White Sea/Barents Sea harp seals. One such limit may be the historical minimum population size which may represent N_{lim} (as suggested by ACFM). A second reference point could be the population level that would result in a low level of probability that the population is at the minimum size (i.e., N_{pa}). The ACFM was furthermore requested to assess the impact over a ten year period on the mentioned stocks of: a) current catch levels; b) sustainable catches (defined as fixed annual catches that stabilises the future 1+-population); c) twice the sustainable catches.

In February 2003 the WGHARP will arrange a workshop to examine methods of modeling of pinniped populations, with specific focus on North Atlantic harp and hooded seal populations. At this workshop, a variety of population models are to be presented and their performance evaluated under different scenarios concerning the availability of data and the degree of uncertainty expected. When WGHARP meets in Arkhangelsk, Russia from 1–5 September 2003, it will review the results and recommendations from the "Workshop to Develop Improved Methods for Providing Harp and Hooded Sea Harvest Advise", possibly also apply recommended models to existing data on harp and hooded seals. Upon this background, also the questions raised in the request from the Joint Norwegian-Russian fisheries Commission will be addressed.

The present Working Group appreciate the efforts of WGHARP and expects the forthcoming advice to be useful for future management of the northeast Atlantic stocks of harp and hooded seals. The fact that the realised catches has been far below the recommended sustainable levels, i.e., the level that is risk neutral with regard to maintaining the populations at their current sizes, is a matter of great concern for the Working Group. This applies in particular to the stocks of harp seals. For example, in 2002 only 4.5% of the recommended harp seal quota was taken in the Greenland Sea, whereas in the Barents Sea / White Sea 30.9% of the quota was realised. A logical consequence of this would be an increase in population size, but verification of this must await new abundance estimates for the stocks.

It has been shown that the Barents Sea / White Sea stock of harp seals, which now counts approximately 2 million animals, may have an annual consumption of as much as 3.3-3.5 million tonnes of biomass, of which a little over 2 million tonnes are fish species. Although the distribution of this biomass on fish species still remains partly unresolved and must await further research, it is evident that both capelin, polar cod and herring are important food items. Harp seal consumption of capelin may be of the same order of magnitude as the consumption of this fish by cod in the area. This is certainly a matter of concern, and harp seal predation will most likely have to be taken into account in both the assessment and management of the Barents Sea stock of capelin. On this background the Working Group emphasizes the necessity of and **recommend** to

address questions relating to the management of harp seals in a multispecies perspective.

3.4 Prospects for future sealing activities

Due to the concerns over the apparent lack of ability on both the Norwegian and Russian side to fulfill quotas, in combination with the multispecies perspective of seal management, the Working Group has addressed questions concerning prospects for future sealing activities.

The main problem for the sealing industry in the last 2-3 decades has been the market situation. Protest activities initiated by several Non-governmental Organisations in the 1970s destroyed many of the old markets for traditional seal products which were primarily the skins. The results has been reduced profitability which subsequently resulted in reduction in available harvest capacity (e.g., the availability of ice-going vessels) and effort. With the present reduced logistic harvest capacity in Norway and Russia it is impossible to take out catches that would stabilise the stocks at their present levels. Unless sealing again becomes profitable, it is likely that this situation will prevail.

Recently, however, there have been some indications that the market situtation for traditional seal products is in a process of improvement. Canada has resumed large scale catch activities after several years with very low effort, and in Norway the profitability of sealing has improved, in particular in 2002. An important reason for this is increased prices on some of the skin products, in particular beaters (weaned and moulted harp seal pups) and bluebacks (weaned hooded seal pups). Norwegian sealing has been unprofitable for many years, but to keep the activities alive the authorities has provided some governmental subsidies (14.5 million NOK in 2002). It is, however, the intention that Norwegian sealing shall be normalised such that management and catch activities can be organised according to the same procedures as the fish resources on a commercial basis. A national Marine Mammals Council has been established in Norway – the main objective for this council will be to provide management advice to Norwegian authorities in questions regarding marine mammals, both seals and whales. This establishment is a part of normalisation of the management of marine mammals.

On the Russian side the present harp seal catch logistics in the White Sea implies the use of helicopters. This is very expensive, and future activity will depend very much on increased profitability in the operations. On the Russian side there are now no available ice-going sealers. The possibility to use Norwegian sealing vessels in the White Sea catch has been discussed, but no practical results have been obtained.

The Working Group concluded that the possible change in the market situation may represent a key to how future sealing should be organised. As a result of this, the group **recommends** that an arena be defined, where experts involved in the various aspects and branches of sealing can meet. This must primarily be a meeting for people from all levels of the sealing industry, including participants with knowledge of both the sealing itself, the products and their application, and the market prospects. Themes addressed should primarily focus on market prospects for traditional products (skins), but also the possibility to introduce "new" products (meat- or blubber-based) on

the markets should be assessed. Participation also from other seal hunting nations must be secured, in particular Canada, but maybe also Greenland and Namibia. To ensure input about the resource bases and management, also participants from management authorities and science is needed. One possible venue for such a meeting could be Archangelsk, Russia, in September 2003. This would secure a back-to-back arrangement with WGHARP. SevPINRO is willing to host both events.

The Working Group has previously emphasized that any joint Norwegian-Russian sealing projects (which might be one possible outcome of an expert meeting) should be initiated and driven by commercial interests. They should focus on the possibilities with respect to the market situation both in Russia, Norway and elsewhere, and production of traditional and new seal products should be designed in such a way that they become profitable. The governmental role in this joint activity should be restricted to establishing the necessary framework, including to secure that the suggested meeting be held in Archangelsk.

4. RESEARCH PROGRAM FOR 2003+

4.1. Norwegian investigations

4.1.1 Collection of biological material from the commercial hunt

Biological material, to establish age distributions in catches as well as reproductive and nutritive status of the animals, will, if practically feasible, be collected from commercial catches in the southeastern Barents Sea in 2003. On a longer term, such data will be collected also in the Greenland Sea. Data necessary to assess the reproductive status of the harvested seal stocks will also be collected in the near future.

Studies of the ecology of harp and hooded seal pups in the Barents Sea and Greenland Sea will be continued. The long term aim of these investigations is to get a better understanding of the underlaying mechanisms determining the recruitment success from year to year for the two species. The implication of this seal pup project in 2003 is biological sampling from approximately 600 harp seal pups taken in the commercial hunt in the southeastern Barents Sea. Body condition data will also be secured from some of the adult seals taken in the commercial catches.

4.1.2 Estimation of hooded seal pup production in the Greenland Sea

Last time hooded seal pup production was assessed in the Greenland Sea was in 1997. Since abundance estimates of hunted seal stocks should be obtained preferably every 4-5 year, Norway plan to conduct surveys to obtain data necessary for estimation of the abundance of hooded seals of the Greenland Sea stock in the near future, preferably in 2004 or 2005. The methodological approach will be designed along the same lines as the recent (2002) Greenland Sea harp seal

survey, i.e., to conduct aerial surveys of pups in the Greenland Sea pack-ice during the whelping period (March-April). A fixed-wing twin-engined aircraft (stationed in Scoresbysound, Greenland) will be used for reconaissance flights and photographic surveys along transects over the whelping patches once they have been located and identified. A helicopter, stationed on and operated from a research vessel, will assist in the reconnaissance flights, and subsequently fly visual transect surveys over the whelping patches. The helicopter will also be used for other purposes (stageing of pups and tagging). As part of the preparations, fuel to be used by the aeroplane must be transported by ship to Scoresbysound the summer before the surveys, i.e., during summer in 2003.

4.1.3 Ecology of harp and hooded seals in the Greenland Sea

A project aimed to provide the data necessary for an assessment of the ecological role of Greenland Sea harp and hooded seals throughout their distributional area of the Nordic Seas (Iceland, Norwegian, Greenland Seas) was conducted in 1999-2002. The field work is now completed, and it is the intention that the data shall be analysed and prepared for publication in 2003.

4.2.Russian investigations.

4.2.1 Harp seal pup production in the White Sea in 2000

It is the intention that Russian scientists in 2003 shall finish analyses and publish the results from the aerial surveys of the harp seal pup production in the White Sea in 2000.

4.2.2 Studies of harp seal breeding and pup production in the White Sea in 2003

In the following years Russia will most likely not have ice-going sealing vessels capable to conduct commercial and scientific sealing in the White, Barents and Greenland Seas. Therefore, biological material for determination of age structure in catches and the reproductive and feeding status of adult females will, if practically feasible, be collected during the 2003 commercial seal hunt in the White Sea. Collection of material on the biology of harp seal pups will be continued under a program including both commercial and scientific quotas (mortality, whelping terms, morphophysiological parameters, pollution etc.). In addition, the program provides data that can be used to prepare advices concerning the conduction of surveys on the breeding and moulting grounds in the White and Barents Seas. Within the framework of the scientific program it is intended to collect biological samples from 500 adult females and 500 pups of any sex. It is also the intention to continue research on the feeding habits of the seals and their interactions with commercially important fish species.

During the 2003 sealing season an aerial photographic survey, aimed to estimate the harp seal pup production on the breeding grounds in the White Sea, is planned. For this purpose the plane "Arctica" AN-26, based in Archangelsk, will be used. The methodology used will be the same as applied in the White Sea surveys in 1998-2000. Depending on ice or other conditions, work aimed to correct the survey parameters will also be carried out.

In April - May 2003, studies of harp seal spring migrations in the White Sea will be continued in the upper part of Kandalaksha Bay.

4.3. Joint Norwegian - Russian investigations

4.3.1 Feeding habits of harp seals in open waters of the Barents Sea

In 2001 and 2002, Norwegian and Russian scientists performed an aerial survey to assess whether there was an overlap in distribution, and thus potential predation, between harp seals and capelin in the Barents Sea. This experiment will now be followed with boat-based surveys aimed to study pelagic feeding by harp seals in the Barents Sea during summer and autum. The project is planned to run over a three-year period (2003-2005). A first survey to address these questions will take place in June-July 2003. In the Norwegian area (NEZ) a chartered Norwegian fishing vessel will be used, whereas a Russian vessel will be applied in REZ. There will be a mix of Norwegian and Russian scientific personell on both vessels. The boat-based survey may be supported with aerial reconnaissance surveys performed by a Russian aeroplane.

4.3.2 Tagging of Barents Sea / White Sea harp seals with satellite tags

The successsful joint Norwegian-Russian 1996 project (and a similar project during harp seal breeding in 1995) with tagging of harp seals with satellite transmitters in the White Sea will be continued with final analyses of data and joint publication of results in 2003. The Working Group **recommends** that satellite tagging experiments with harp seals in the White Sea are continued jointly between Norwegian and Russian scientists with the purpose to study distribution, migrations and daily activity of the seals. This will give an important contribution to a better understanding of the temporal and spatial distribution of the seals, which is important input data when their total consumption of marine resources in the Barents Sea is to be assessed. It is important that animals of different sexes and ages are tagged. Preferably, 2003 will be used to select the right tag types, to sort out potential legal problems involved in using this sort of equipment in the White Sea, and to secure funding.

4.3.3 Life history parameters in harp seals

In another joint Norwegian-Russian project, using data collected by Russian scientists in the Greenland Sea in previous years, life history parameters (growth, age at maturity, fecundity, ovulation time) of harp seal females are being studied. This work will be continued with final joint publication in 2003.

Upon request, forwarded during meetings of the Joint Norwegian-Russian Fisheries Commission, one Russian scientist was invited to participate in scientific work on Norwegian sealers during March-April in 1997-1999 in the southeastern part of the Barents Sea, and in 2000 in the Greenland Sea. This Norwegian-Russian research cooperation is encouraged, e.g., by extending an invitation to Russian scientists to participate on Norwegian sealers in the southeastern Barents

Sea and/or in the Greenland sea also in 2003. This would enable coordinated and joint sampling of biological material. The Working Group **recommend** that Russian scientists are offered the possibility to participate in Norwegian research activities in 2003 as described above.

From the Russian side it has been suggested that Norwegian and Russian scientists coordinate their research on various biological aspects of the early life phase of seal pups in the White Sea / Barents Sea. Exchange of data and joint publication should be considered. Russian scientists also suggest to repeat previous (1970 – 1980) workshops, where experience of different countries scientists concerning the determination of seal age were exchanged. For this purpose, the use of teeth from seals of known age should be used. As a first step in this activity, one Russian expert has been invited to stay in Norway (Tromsø) in January/February 2003 to study the age of harp seals taken in the Norwegian commercial hunt in recent years..

For completion of the proposed Norwegian and Russian research programs, the following numbers of seals are planned to be caught under special permits for scientific purposes in 2003:

Area/species/category	Russia	Norway
Barents Sea / White Sea		
Whelping grounds		
Adult breeding harp seal females	500	0
Harp seal pups	500	0
Outside breeding period		
Harp seals of any age and sex	2000	200
Ringed seals	400	0
Bearded seals	300	0
Greenland Sea*		
Whelping grounds		
Adult breeding harp seal females	500**	0
Harp seal pups	500**	0
Adult breeding hooded seal females	500**	0
Hooded seal pups	500**	0
Outside breeding grounds		
Harp seals of any age and sex	0	0
Hooded seals of any age and sex	0	0
Ringed seals	10*	200
Bearded seals	10*	0

* If Greenland Sea quotas are allocated to Russia, these will be used for collection of biological samples

** Only possible if convenient vessel will be available

5. OTHER BUSINESS

5.1 White whale research

The Working Group **recommends** that Russian and Norwegian scientists unite efforts to develop techniques for studies (including abundance estimation, studies of migration using satellite tags) of white whales in the White Sea. Russian scientists offer Norwegian scientists the opportunity to take part in white whale investigations within the White Sea on a Russian vessel in 2003-2004. The Working Group suggest that NAMMCO is requested to do an assessment of White Sea white whales.

5.2 Studies of minke whale ecology

The northeast Atlantic stock of minke whales is known to consume a substantial amount of fish (including commercially important species such as capelin, herring and gadoids). To improve the data base needed to assess the impact of minke whales on the Barents Sea fish stocks, it was suggested at the 2001 meeting of the Joint Norwegian-Russian Fisheries Commission that a research program be developed. In response to this, a joint Norwegian-Russian research program to particularly study the ecology of minke whales in the REZ part of the Barents Sea was developed by professor Tore Haug (Norway) and drs Vladimir Potelov and Vladislav Svetochev (Russia). This would imply a take in REZ of 50 minke whales per year for scientific purposes during the investigation period (2002-2005). Norway has approved such a program, and an application was sent to Russian authorities to permit two Norwegian whaling boats, each with a Norwegian/Russian scientific crew, to hunt a total of 50 minke whales in REZ in 2002. Russian authorities permitted the Norwegian vessels to into the REZ, but unfortunately they were not allowed to hunt whales. The project therefore had to be cancelled in 2002. The Working Group **recommends** that a new attempt to initiate the joint Norwegian-Russian research program on minke whale ecology in REZ is made, and that the program be designed to run over the period 2003-2006.

6. APPROVAL OF REPORT

The English version of the Working Group report was approved by the members on 8 November, 2002.

VEDLEGG 9

PROTOKOLL

MØTE I DET NORSK – RUSSISKE PERMANENTE UTVALG FOR FORVALTNINGS- OG KONTROLLSPØRSMÅL PÅ FISKERISEKTOREN - MURMANSK, 30. SEPTEMBER. – 5. OKTOBER 2002.

På den 22. sesjon i Den blandete norsk- russiske fiskerikommisjon, jfr protokollen pkt 11.2, opprettet partene Det permanente utvalg for forvaltnings- og kontrollspørsmål på fiskerisektoren

Partenes delegasjoner fremgår av vedlegg 1.

Møtet ble avholdt i henhold til saksliste, jfr. vedlegg 2.

1. **Åpning av møtet.**

2. **Godkjenning av dagsorden.**

3. **Kontroll og håndhevelse i Barentshavet. Utveksling av informasjon angående inspeksjoner av og reaksjoner overfor fiskefartøy i perioden 1999 – 2001 (norske, russiske og 3. lands fartøy).**

   Partene orienterte hverandre om status for ressurskontroll og utvekslet informasjon om kontrollomfang og reaksjoner i perioden 1999 – 2001

   Fiskeridirektoratet opplyste at en på grunnlag av nedgang i antall overtredelser hadde redusert kontrollinnsatsen rettet mot russiske fiskefartøys leveranser, se vedlegg 3.

   Den norske Kystvakten orienterte spesielt om prinsipper og retningslinjer for ressurskontroll, hovedproblemer i perioden, prosedyre ved alvorlige overtredelser og håndhevelse generelt. I denne forbindelse ble det informert om de forskjellige grader av reaksjon på avdekkede overtredelser; påpekning (muntlig veiledning innen regelverket), advarsel (skriftlig reaksjon på overtredelser) og anmeldelser/oppbringelser (strengeste reaksjon på alvorlige overtredelser). Det ble presisert at håndhevelse finner sted utfra målsetningen om enhetlig og konsekvent myndighetsutøvelse på ikke-diskriminerende basis.

Det fremgår av Kystvaktens kontrollstatistikk for Norges økonomiske sone nord for 65 grader nord for perioden 1999 – 2001, at norske fartøy ble inspisert hyppigere enn russiske fartøy, og at reaksjonsprosenten for alvorlige overtredelser (oppbringelse/anmeldelse) var høyere for norske enn for russiske fartøy i perioden 1999 – 2000 og tilnærmet lik i 2001 Se vedlegg 4 a, b og c

Den norske Kystvakten overleverte den russiske part omfattende kontrolldokumentasjon om inspeksjoner vedrørende omlasting til havs. I 2002 er det registrert 49 mottaksfartøy, 109 leverende fiskefartøy og minst 40 000 tonn omlastet kvantum. Omlasting til havs og gjennomgang av det tallmateriale som foreligger, vil være hovedtema for partenes kontrollseminar på Sortland i uke 42 Den norske part anmodet den russiske part om å fremskaffe kvoteregnskap, rapporteringsdokumentasjon og sporingsdata til kontrollseminaret, for at partene i fellesskap skal kunne foreta en helhetlig vurdering av omlastingsproblematikken Den russiske part opplyste om at en vil analysere den mottatte dokumentasjonen, og levere nødvendig informasjon på seminaret i samsvar med Memorandum om kontroll, punkt 4.1.

Den russiske part presenterte informasjon om kontroll av fartøy fra Russland, Norge og tredje land i Russlands økonomiske sone i perioden 1999 – 2001

4. Utveksling av informasjon om håndhevelse av nasjonal fiskerilovgivning i straffesaker mot norske, russiske og 3. lands fartøy.

Den norske part orienterte om den norske påtalemyndighetens organisering, det norske domstolsystemet, samt om gangen i etterforsking, påtalehåndtering og prosedering av fiskerisaker etter norsk prosesslovgivning Det ble herunder redegjort for fartøyføreres rettigheter som mistenkt i en straffesak, adgang til forsvarer og adgang til å få prøvd saken for domstolen

Den norske part redegjorde for Troms og Finnmarks statsadvokatsembeters retningslinjer til politiet om håndtering av fiskerisaker, særlig retningslinjer for fastsettelse av størrelsen på bot og inndragning. Det ble herunder redegjort for norsk rettspraksis og dens sentrale betydning for politiets reaksjonsfastsettelse

Den norske part redegjorde videre for Troms og Finnmarks statsadvokatsembeters kontroll av politiets påtalevedtak i fiskerisaker for perioden 1999 – 2001. Det ble vist til eksempler fra 1999 og 2000 hvor norsk påtalemyndighet har reagert for mildt mot norske fartøyførere og rederier, men at dette for året 2001 ikke lengre kan påvises. Den norske part legger til grunn at de påviste skjevheter er et tilbakelagt stadium, hvilket bl a har sammenheng med Troms og Finnmarks statsadvokatsembeters retningslinjer av oktober 2001 til politiet samt utviklingen innen norsk rettspraksis.

Den russiske part informerte om lovovertredelser av utenlandske fiskefartøy i Russlands økonomiske sone. En bred analyse av overtredelser av fiskerilovgivningen ble presentert. Den norske part fikk overlevert en liste over fartøy som har overtrådt gjeldende bestemmelser.

Den norske part overleverte til den russiske part

- Retningslinjer fra Troms og Finnmark statsadvokatsembeter for saker som gjelder brudd på lov om Norges økonomiske sone Retningslinjene er datert oktober 2001 og sist revidert 18.9.02.
- Troms og Finnmark statsadvokatsembeters oversikt over domstolens avgjørelser i fiskerisaker i Nord-Norge i tiden 1994 – 2001.
- Rapporter fra Troms og Finnmark statsadvokatsembeters kontroll av politiets håndtering av fiskerisaker 1999 – 2001.
- Norges Høyesteretts dom av 6.9.02.
- Kystvaktlovens § 35 om hefte
- Høyesteretts kjæremålsutvalgs kjennelse av 2 3.95 om hefte.
- Høyesteretts kjæremålsutvalgs kjennelse av 20.4 95.
- Oversikt over Norges Høyesteretts praksis i perioden 1953 – 2002.

5. Utveksling av informasjon om rettsregler og praksis i spørsmål om mulig utsatt iverksettelse av reaksjon.

Den norske part redegjorde for norsk påtalemyndighets behov for å kunne oppbringe utenlandske fartøy til norsk havn ved skjellig grunn til mistanke om overtredelse av norsk fiskerilovgivning. Det ble pekt på behov for å sikre bevis, herunder behov for at politiet foretar avhør av fartøyfører, behov for å sikre inndrivelse av fremtidige pengekrav mot fartøyføreren og rederi som følge av rettskraftig dom, samt behov for å stevne fartøyfører og rederi inn for domstolen Dette kan skje på betryggende måte av politiet etter at fartøyføreren og fartøyet ankommer havn. Det ble samtidig pekt på at det som hovedregel ikke er lovmessig adgang til å ta hefte i norske fartøy.

Representanten fra Murmansk fylkes påtalemyndighet informerte den norske part om russisk lovgivnings særtrekk, gjeldende lov om rasjonell anvendelse og bevaring av levende biologiske ressurser i saltvann og ferskvann, russiske påtalemyndigheters rettigheter og plikter samt deres system og virksomhetsprinsipper.

6. Diskusjon om forenkling, standardisering og etablering av et elektronisk basert rapporteringssystem for fiskefartøy (inkludert pilotprosjekt).

Partene viste til det felles arbeidsdokument om forenkling, standardisering og etablering av et elektronisk basert rapporteringssystem som ble utarbeidet på møtet i Det permanente utvalg i Ullensvang i mai 2002. Det var enighet om at en så omfattende omlegging av rapporteringssystemet som samtidig er i prosess i andre fora, krevde ytterligere arbeid på fremtidige møter i Det permanente utvalg. Målet med arbeidet er som kjent å etablere et likt elektronisk rapporteringssystem for alt fiskeri som utøves i Nordatlanteren.

Den norske part overleverte "nøkkel" (programvare) for sikker utveksling av landingsdata mellom Fiskeridirektoratet og Murmanrybvod.

Den norske part demonstrerte rapporteringsprogrammet SatRap 3 basert på elektronisk overføring av data (program for rapportering av fiskeriaktivitet fra fiskefartøy).

Videre ble det orientert om et norsk pilotprosjekt for testing av SatRap 3 der ca. 30 norske fartøy vil delta

Den russiske part tok den norske parts forslag om å gjennomføre et norsk-russisk pilotprosjekt til etterretning Den norske part forpliktet seg til å fremlegge konkrete forslag til et pilotprosjekt i nærmeste fremtid Den russiske part forpliktet seg til å vurdere forslagene og å presentere resultatene på neste møte i Det permanente utvalg.

7. Utveksling av informasjon angående utviklingen av sorteringsristsystemer.

Den russiske part informerte om status for arbeidet med sorteringsristsystemene, fremstilt av forskjellige materialer – nylon og polyethylene – samt om de geometriske variasjoners innvirkning på selektiviteten. På grunnlag av de utførte forsøkene anbefalte den russiske part at begge typer materiale anbefales til bruk i sorteringssystemene. Partene var enige om å fortsette arbeidet med å utvikle nye sorteringsristsystemer

8. Felles måletokt for fastsettelse av omregningsfaktorer for hyse.

Partene informerte om gjennomføringen av et felles måletokt i september 2002 med det formål å fastsette omregningsfaktorer for hyse

Den russiske part gjorde rede for resultatene av det felles måletokt og det ble gjort oppmerksom på forskjellen fra de omregningsfaktorer som er midlertidig godkjent av Den norsk-russiske fiskerikommisjonen, som en følge av endringer i fangstforholdene.

Spesialistene vil forberede rapporter for Det permanente utvalg om det arbeid som ble utført i 2002. Spesialistene vil starte arbeidet med å analysere tilgjengelige data innsamlet i perioden 1993 til 2002 etter de prinsipper som er beskrevet i den felles norsk-russiske metode for måling og beregning av omregningsfaktorer.
Spesialistene vil utveksle resultater i 2003.

Partene ble enige om å foreta et norsk-russisk måletokt i 2003 på et russisk fartøy for å fastsette omregningsfaktorer på hyse på grunn av behovet for å få ytterligere data på bakgrunn av endringer av fangstforholdene

Endelig avgjørelse om endring av omregningsfaktorene for hyse vil kunne tas etter at resultatene av et nytt måletokt foreligger, er bearbeidet og analysert sammen med tidligere innsamlede data.

Etter gjennomføring av forskningstoktet skal hver av partene fremlegge rapport om det arbeidet som er gjort for Det permanente utvalg

Spesialistene skal utveksle rapporter og samarbeide om utarbeidelse av et felles forslag og anbefaling til omregningsfaktorer for hyse i Det permanente utvalg.

9. Utveksling av informasjon om fartøy som har fisket opp årets kvote.

Partene utvekslet informasjon om de nasjonale kvotesystemene Det var enighet om at partene skulle konkretisere utveksling av informasjon på inspektørmøte på Sortland i uke 42.

10. Utarbeidelse av kriterier for stenging og åpning av områder med for mye bifangst av kongekrabbe i andre fiskerier.

Partene orienterte hverandre om det arbeidet forskerne hadde utført når det gjaldt analysering av bifangst av kongekrabbe i andre fiskerier. Russiske forskere fremla informasjon om bifangstrater og øvre grense i trålfiske. Informasjonen ble tatt til etterretning. Det permanente utvalg er av den oppfatning at en per i dag ikke har tilstrekkelig grunnlag til å foreslå konkrete kriterier for stenging og åpning av fiskefelt. Utvalget ber derfor forskerne fra de to land om å fortsette arbeidet med å fremskaffe nødvendige data for utarbeidelse av kriterier for stenging og åpning av fiskefelt på grunn av bifangst av kongekrabbe i andre fiskerier

11. Det kommende seminar for inspektører (uke 42).

Partene diskuterte praktiske spørsmål angående neste inspektørseminar Seminaret for 2002 vil avholdes i Sortland i uke 42 (fra 14 – 18. oktober 2002) Videre ble partene enige om at det fra hver part kan delta maks. 3 inspektører. Partene var enige om at seminarets hovedtema skal være omlasting til havs og forbedring av kontrolltiltak. Den norske part utarbeider forslag til programmet for det forestående seminaret.

12. Neste møte.

Neste møte i utvalget finner sted i Norge Tid og sted avtales senere.

Murmansk, 5. oktober 2002

For de norske representantene

Lisbeth W Plassa

For de russiske representantene

Boris Prishchepa

VEDLEGG 1.

DELTAGERLISTE

MØTE I DET PERMANENTE UTVALG FOR FORVALTNINGS- OG KONTROLLSPØRSMÅL PÅ FISKERISEKTOREN – MURMANSK, 30. SEPTEMBER – 5. OKTOBER 2002.

Den norske delegasjonen:

1. Lisbeth W. Plassa, avdelingsdirektør, Avdeling for fiske og fangst, Fiskeridirektoratet
2. Øystein K. Wemberg, sjef Kystvaktskvadron Nord
3. Lars Fause, statsadvokat i Troms og Finnmark
4. Grethe A. Kuhnle, underdirektør, Fiskeriøkonomisk avdeling, Fiskeridirektoratet
5. Stein-Åge Johnsen, seksjonsleder, Avdeling for fiske og fangst, Fiskeridirektoratet
6. Tor Glistrup, rådgiver, Avdeling for kvalitet, kontroll og regional forvaltning, Fiskeridirektoratet
7. Are Strand, rådgiver, Fiskeriøkonomisk avdeling, Fiskeridirektoratet
8. Hilde M Jensen, konsulent, Avdeling for fiske og fangst, Fiskeridirektoratet
9. Ingmund Fladaas, tolk
10. Håvard Vegge, tolk

Den russiske delegasjonen:

1. Boris F. Prishchepa, sjef for Murmanrybvod
2. Victor B Petrov, senior spesialist, Den russiske stats fiskerikomite
3. Valery A. Krasnoslobodtsev, avdelingsleder, Den russiske stats fiskerikomite
4. Andrey V Melnichenko, statsadvokat i Murmansk region
5. Pavel A. Latyshev, senior statsinspektør, Murmanrybvod
6. Valery Lulakov, sjef for inspektoratet, Grensevaktstyrkene
7. Viktor N Rozhnov, assisterende nestleder for inspektoratet, Grensevaktstyrkene
8. Nina D. Zhuikova, senior statsinspektør, Murmanrybvod
9. Igor Povalyukhin, senior statsinspektør, Murmanrybvod
10. Marina V. Sytova, avdelingsleder, Den russiske stats fiskerikomite
11. Boris I. Berenboim, laboratoriesjef, PINRO
12. Yury A. Kondratyuk, forsker, PINRO
13. Elena Kharenko, laboratoriesjef, VNIRO
14. Sergey A. Sennikov, tolk

VEDLEGG 2.

MØTE I DET PERMANENTE UTVALG FOR FORVALTNINGS- OG KONTROLLSPØRSMÅL PÅ FISKERISEKTOREN – MURMANSK, 30. SEPTEMBER – 5. OKTOBER 2002

SAKSLISTE

1. Åpning av møtet.
2. Godkjenning av dagsorden.
3. Kontroll og håndhevelse i Barentshavet. Utveksling av informasjon angående inspeksjoner av og reaksjoner overfor fiskefartøy i perioden 1999 – 2001 (norske, russiske og 3. lands fartøy).
4. Utveksling av informasjon om håndhevelse av nasjonal fiskerilovgivning i straffesaker mot norske, russiske og 3. lands fartøy.
5. Utveksling av informasjon om rettsregler og praksis i spørsmål om mulig utsatt iverksettelse av reaksjon.
6. Diskusjon om forenkling, standardisering og etablering av et elektronisk basert rapporteringssystem for fiskefartøy (inkludert pilotprosjekt).
7. Utveksling av informasjon angående utviklingen av sorteringsristsystemer.
8. Felles måletokt for fastsettelse av omregningsfaktorer for hyse.
9. Utveksling av informasjon om fartøy som har fisket opp årets kvote.
10. Utarbeidelse av kriterier for stenging og åpning av områder med for mye bifangst av kongekrabbe i andre fiskerier.
11. Det kommende seminar for inspektører (uke 42).
12. Neste møte.

VEDLEGG 3

CONTROL AND REACTIONS

1999 – 2001 – RUSSIAN VESSELS

LANDINGS IN NORWAY

	CONTROLS	Withdrawel of value ill. fish	Written warning	Report to police
1999	373	2	15	3
2000	289	0	3	0
2001	56	0	0	0

NØS unntatt for 65° N

ÅR: 1999

Land	Totalt	% av total	IÅM	% av IÅM	Advarsel	% av adv.	Anm/ Oppbr	% av anm/oppb
Danmark								
England	62	4,8	50	80,6	10	16,1	2	3,2
Estland	1	0,1	0	0,0	0	0,0	1	100,0
Frankrike	12	0,9	11	91,7	0	0,0	1	8,3
Færøyene	35	2,7	33	94,3	0	0,0	2	5,7
Grønland	10	0,8	10	100,0	0	0,0	0	0,0
Irland	3	0,2	3	100,0	0	0,0	0	0,0
Island	15	1,2	11	73,3	4	26,7	0	0,0
Norge	575	44,9	471	81,9	76	13,2	28	4,9
Portugal	15	1,2	12	80,0	2	13,3	1	6,7
Russland	502	39,2	436	86,9	46	9,2	18	3,6
Spania	31	2,4	26	83,9	2	6,5	3	9,7
Tyskland	21	1,6	19	90,5	2	9,5	0	0,0
Total	1282	100,1	1084	84,6	142	11,1	56	4,4

VEDLEGG 4 A

NØS nord for 65° N

ÅR: 2000

Land	Totalt	% av total	IÅM	% av IÅM	Advarsel	% av adv.	Anm/ Oppbr	% av anm/oppbr
Danmark								
England	18	1,4	14	77,8	4	22,2	0	0,0
Estland								
Frankrike	12	0,9	11	91,7	1	8,3	0	0,0
Færøyene	14	1,1	13	92,9	1	7,1	0	0,0
Grønland	6	0,5	6	100,0	0	0,0	0	0,0
Irland	3	0,2	2	66,7	0	0,0	1	33,3
Island	17	1,3	12	70,6	4	23,5	1	5,9
Norge	650	50,7	549	84,5	69	10,6	32	4,9
Portugal	14	1,1	14	100,0	0	0,0	0	0,0
Russland	308	24,0	276	89,6	26	8,4	6	1,9
Spania	27	2,1	19	70,4	2	7,4	6	22,2
Tyskland	8	0,6	7	87,5	1	12,5	0	0,0
Total	1077	100,0	923	85,7	108	10,0	46	4,3

VEDLEGG 4 B

NØS nord for 62° N

ÅR: 2001

Land	Totalt	% av total	IÅM	% av IÅM	Advarsel	% av adv	Anm/ Oppbr	% av anm/oppbr
Danmark	2	0,2	2	100,0	0	0,0	0	0,0
England	28	2,2	25	89,3	2	7,1	1	3,6
Estland								
Frankrike	5	0,4	4	80,0	1	20,0	0	0,0
Færøyene	12	0,9	10	83,3	1	8,3	1	8,3
Grønland	6	0,5	4	66,7	2	33,3	0	0,0
Irland	1	0,1	1	100,0	0	0,0	0	0,0
Island	16	1,2	9	56,3	5	31,3	2	12,5
Norge	571	44,1	463	81,1	85	14,9	23	4,0
Portugal	12	0,9	11	91,7	1	8,3	0	0,0
Russland	289	22,3	232	80,3	45	15,6	12	4,2
Spania	12	0,9	9	75,0	3	25,0	0	0,0
Tyskland	16	1,2	14	87,5	1	6,3	1	6,3
Total	970	100,3	784	80,8	146	15,1	40	4,1

VEDLEGG 4 C

VEDLEGG 10

JOINT NORWEGIAN – RUSSIAN SCIENTIFIC RESEARCH PROGRAM ON LIVING MARINE RESOURCES IN 2003

Contents

1. Planning and coordination of investigations and submitting of results

This program contains the investigations to be carried out in 2003 by Norway and Russia within the frames of the bilateral cooperation between the Norwegian and the Russian parties. The program is in accordance with the two national research programmes. Planning, coordination, accomplishment of the investigations, exchange of specialists, data and results will be settled between the two institutes involved. Scientists and specialists from PINRO and IMR will meet in Murmansk 25-27 March 2003, to discuss results from surveys and investigations in 2002/2003 and to coordinate survey plans for the rest of 2003. Missing names on vessels and time periods for surveys in this report will be submitted, latest at the March meeting. Future plans for surveys and methodology for preparing biological and acoustic data will be discussed and coordinated. Urgent information according to surveys carried out before the meeting in March will be exchanged by correspondence.

In total, five reports have been issued in the Joint IMR-PINRO Report Series during 2002.

A preliminary program for the planned surveys and cooperation is presented below.

2. Investigations on demersal stocks, including stock size,-structure,-distribution,-interactions and -ecology

IMR and PINRO will continue the co-operation on the monitoring of the most important commercial demersal fish stocks. The work will also include continued co-operative research on:

- the stock structure of Northeast arctic cod, based on the joint research program 2002-2004.
- shrimp research as recommended by the ICES working group – with the objective to give recommendations that include the conservation of biodiversity.
- by-catch of juvenile fish in the shrimp fishery.
- species interactions between cod, herring, capelin and marine mammals.
- investigations on Greenland halibut and Red King crab according to agreed joint research programs, 2002-2004.

Data and results will be reported to the ICES Arctic Fisheries Working Group (AFWG).

Demersal fish – Norwegian investigations

Nation:	Norway	Survey title:	Cod spawning stock
Time period:	21.03 – 06.04	Vessel:	G.O. Sars
Target species:	Cod	Secondary species:	Haddock, Saithe
Area:	Spawning areas Troms - Lofoten		
Purpose:	Acoustic survey of the North East Arctic Cod spawning stock. Investigations on maturity, fecundity and egg abundance.		
Reported to:	Internal IMR survey report, ICES AFWG 2003		

Nation:	Norway	Survey title:	Genetic mapping of cod on spawning areas
Time period:	01.04 – 04.05	Vessel:	Fangst
Target species:	Cod	Secondary species:	
Area:	Fjord areas in Troms and Finnmark		
Purpose:	Collection of genetic material (cooperation with Russian scientists) Ref corresponding Russian surveys in REZ)		
Reported to:	Internal IMR survey report. PINRO		

Nation:	Norway	Survey title:	Abundance of Sebastes marinus
Time period:	01.05 – 30.06 (14 d.)	Vessel:	Hired commercial trawler
Target species:	Sebastes marinus	Secondary species:	Saithe
Area:	Møre - Finnmark		
Purpose:	Abundance of Sebastes marinus based on catch rates (CPUE)		
Reported to:	Internal IMR survey report,		

Nation:	Norway	Survey title:	Greenland halibut, trawl CPUE
Time period:	20.05 – 30.05	Vessel:	Two hired commercial trawlers
Target species:	Greenland halibut	Secondary species:	
Area:	Troms – Spitsbergen 70°30'N - 73°30'N (5 days), 73°30'N - 76°00'N (5 days)		
Purpose:	Abundance of Greenland halibut based on catch rates (CPUE)		
Reported to:	Internal IMR survey report, ICES AFWG 2004 and PINRO		

Nation:	Norway	Survey title:	Multi-purpose summer survey
Time period:	05.08 – 09.09 18.08 - 15.09 01.08 – 18.08	Vessel:	Johan Hjort G O Sars Jan Mayen
Target species:	Greenland halibut, Redfish, Shrimp	Secondary species:	Cod, Haddock
Area:	Barents Sea – Svalbard		
Purpose:	Abundance and distribution of Greenland halibut, Sebastes mentella, S. marinus and shrimp. Multi-species interactions with focus on the diet of cod.		
Reported to:	Internal IMR survey report, ICES AFWG 2004		

Nation:	Norway	Survey title:	Bottom trawl survey Greenland halibut
Time period:	01.08 – 23.08	Vessel:	M/V Varegg
Target species:	Greenland halibut Sebastes mentella	Secondary species:	S. marinus
Area:	68°N - 80°N, 400 – 1500 meter depth		
Purpose:	Bottom trawl survey with fixed trawl stations		
Reported to:	Internal IMR survey report, ICES AFWG 2004		

Nation:	Norway	Survey title:	Saithe survey
Time period:	10.10 – 11.11	Vessel:	Johan Hjort
Target species:	Saithe	Secondary species:	Haddock, Cod, Sebastes marinus
Area:	Banks and coastal areas from Varanger to Møre		
Purpose:	Abundance and distribution of demersal fish with focus on saithe. (Coordinated with Russian saithe survey in REZ)		
Reported to:	Internal IMR survey report, ICES AFWG 2004		

Nation:	Norway	Survey title:	Fjord and coastal survey
Time period:	13.10 – 11.11	Vessel:	Jan Mayen
Target species:	Saithe, coastal cod, 0-group herring	Secondary species:	Haddock, Sebastes marinus
Area:	North Norwegian fjord and coastal areas.		
Purpose:	Acoustic and trawl abundance estimation of saithe and coastal cod. Acoustic abundance estimation of 0-group herring. Environmental investigations		
Reported to:	Internal IMR survey report, WBNPBW 2004, AFWG 2004		

Shrimp (Pandalus borealis)-Norwegian investigations

Nation:	Norway	Survey title:	Shrimp survey
Time period:	22.04 – 12.05	Vessel:	Jan Mayen
Target species:	Shrimp	Secondary species:	
Area:	Barents Sea		
Purpose:	Abundance and distribution of shrimp		
Reported to:	Internal IMR survey report, ICES AFWG 2004		

Nation:	Norway	Survey title:	Multi-purpose summer survey
Time period:	01.08 – 18.08	Vessel:	Jan Mayen
Target species:	Greenland halibut, Redfish, Shrimp	Secondary species:	Cod, Haddock
Area:	Barents Sea – Svalbard		
Purpose:	Abundance and distribution of shrimp. Multispecies interactions with focus on the diet of cod.		

Reported to:	Internal IMR survey report, ICES AFWG 2004

Demersal fish - Russian investigations

Nation:	Russia	Survey title:	Cod, haddock
Time period:	01.01-31.12	Vessel:	2 rented trawlers
Target species:	Cod, haddock	Secondary species:	Other demersal species
Area:	Barents Sea including Russian and Norwegian Economic Zones and areas adjacent to Svalbard.		
Purpose:	Collecting CPUE data, biological and fishing data on predator-prey relationship		
Reported to:	Internal survey report, ICES AFWG		

Nation:	Russia	Survey title:	*Sebastes mentella*
Time period:	15.04-20.05	Vessel:	R/V Persey-4
Target species:	*Sebastes mentella*	Secondary species:	Other demersal species
Area:	The Barents Sea including Norwegian Economic Zone and areas adjacent to Svalbard.		
Purpose:	Assessment of abundance and biomass of redfish, oceanography		
Reported to:	Internal survey report, ICES AFWG		

Nation:	Russia	Survey title:	Immature haddock, saithe
Time period:	20.05-20.06	Vessel:	R/V Persey-4
Target species:	Haddock, saithe	Secondary species:	Other demersal species
Area:	The Barents Sea including Norwegian Economic Zone		
Purpose:	Distribution and CPUE for stock assessment		
Reported to:	Internal survey report, ICES AFWG		

Nation:	Russia	Survey title:	Multispecies demersal fish survey
Time period:	15.10-31.12 15.10-31.12	Vessel:	R/V Fridtjof Nansen R/V Kapitan Shaytanov
Target species:	Demersal species	Secondary species:	Other demersal species
Area:	The Barents Sea including Norwegian and Russian Economic Zones and areas adjacent to Svalbard.		
Purpose:	Assessment of cod, haddock and other demersal species stocks, "predator-prey" relation, oceanography		
Reported to:	Internal survey report, ICES AFWG		

Nation:	Russia	Survey title:	Greenland halibut survey
Time period:	16.10-15.11	Vessel:	R/V Nerey
Target species:	Greenland halibut	Secondary species:	Other demersal species
Area:	The Norwegian Sea and areas adjacent to Svalbard.		
Purpose:	Assessment of stock and distribution		
Reported to:	Internal survey report, ICES AFWG		

Nation:	Russia	Survey title:	Greenland halibut survey
Time period:	01.01-31.12	Vessel:	Rented trawler Rented longliner
Target species:	Greenland halibut	Secondary species:	Other demersal species
Area:	Russian Economic Zone and Grey Zone		
Purpose:	Monitoring of stock, CPUE for stock assessment. Improvement of fishing gears.		
Reported to:	Internal survey report, ICES AFWG		

Nation:	Russia	Survey title:	Greenland halibut survey
Time period:	01.01-30.06 01.07-31.12	Vessel:	1rented trawler 1 rented trawler
Target species:	Greenland halibut	Secondary species:	Other demersal species
Area:	Norwegian Economic Zone between 70° 00'-73°30' North		
Purpose:	Stock monitoring, CPUE		
Reported to:	Internal survey report, ICES AFWG		

Nation:	Russia	Survey title:	Greenland halibut survey
Time period:	01.01-30.06 01.07-31.12	Vessel:	1 rented trawler 1 rented trawler
Target species:	Greenland halibut	Secondary species:	Other demersal species
Area:	Bear Island and Spitsbergen, 73°30' - 76°00'N		
Purpose:	Stock monitoring, CPUE		
Reported to:	Internal survey report, ICES AFWG		

Nation:	Russia	Survey title:	Greenland halibut survey
Time period:	01.01-30.06 01.07-31.12	Vessel:	1 rented longliner 1 rented longliner
Target species:	Greenland halibut	Secondary species:	Other demersal species
Area:	Bear Island and Spitsbergen area and Norwegian Economic Zone, 70°00' - 76°00'N		
Purpose:	Stock monitoring, comparison testing trawl-longline, CPUE		
Reported to:	Internal survey report, ICES AFWG		

Nation:	Russia	Survey title:	Coastal and fjord survey
Time period:	01.01-25.12	Vessel:	2 rented vessels
Target species:	cod	Secondary species:	Other demersal species
Area:	Russian coast from Varangerfjord to Svjatoj Nos		
Purpose:	Stock assessment, collection of biological, genetic data for spawning cod		
Reported to:	PINRO, IMR; ICES AFWG		

Nation:	Russia	Survey title:	Cod and haddock
Time period:	15.05-30.09	Vessel:	Two rented vessels
Target species:	cod	Secondary species:	Other demersal species
Area:	Russian coast from Varangerfjord to Svjatoj Nos		
Purpose:	Monitoring of commercial aggregations of coastal and fjord cod, collection of biological and genetic data		
Reported to:	ICES AFWG		

Shrimps and bycatch during shrimp harvesting – Russian surveys

Nation:	Russia	Survey title:	Shrimp and demersal fish
Time period:	20.04-25.05	Vessel:	R/V Vilnus
Target species:	Shrimp and demersal fish	Secondary species:	Other demersal species
Area:	The Barents Sea including Russian Economic Zone and territorial waters		
Purpose:	Assessment of abundance and distribution of shrimp		
Reported to:	Internal survey report, ICES AFWG		

Nation:	Russia	Survey title:	Shrimp and demersal fish
Time period:	01.08-20.08	Vessel:	R/V Vilnus
Target species:	Shrimp and demersal fish	Secondary species:	
Area:	Area adjacent to Svalbard		
Purpose:	Assessment of abundance and distribution of shrimp (Proposed as joint survey)		
Reported to:	Internal survey report, ICES AFWG		

Demersal fish-joint investigations

Nation:	Norway/Russia	Survey title:	Joint Winter Survey
Time period:	27.01 – 05.03	Vessel:	G.O. Sars
	27.01 – 05.03		Johan Hjort
	29.01 – 28.02		Persey-3
Target species:	Cod, Haddock	Secondary species:	Capelin, Sebastes mentella, S. marinus, Greenland halibut
Area:	Barents Sea inclusive NEZ and REZ		
Purpose:	Abundance and distribution of demersal fish and capelin. Multi-species interactions with focus on the diet of cod.		
Reported to:	Joint IMR/PINRO Report Series and ICES AFWG 2003		

Nation:	Norway/Russia	Survey title:	Juvenile Greenland halibut
Time period:	26.08 – 10.09 01.09 – 30.09	Vessel:	Jan Mayen Nerey
Target species:	Greenland halibut	Secondary species:	Shrimp, Sebastes mentella, 0-group fish
Area:	North and east of Spitsbergen, including REZ		
Purpose:	Abundance and distribution of juvenile Greenland halibut and general 0-group fish distribution		
Reported to:	Joint IMR/PINRO Report Series and ICES AFWG 2004		

At its 30th session, the mixed Norwegian-Russian Fishery Commission decided to establish a three year programme of joint Russian-Norwegian investigations of Greenland halibut stocks in 2002-2004. The content of the programme was agreed upon during the annual meeting between Russian and Norwegian scientists in March 2002 , and the working schedule and distribution of responsibilities for individual components of the programme were agreed upon during a meeting in Tromsø 4-5 June 2002.

3. Investigations on pelagic stocks, including stock size, -structure, -distribution, and – ecology.

IMR and PINRO will continue the co-operation on the monitoring of the most important commercial pelagic fish stocks. Data and results will be reported to the ICES Northern Pelagic and Blue Whiting Working Group (NPBWWG).

Pelagic fish – Norwegian investigations

Nation:	Norway	Survey title:	Capelin larvae
Time period:	12.06-27.06	Vessel:	G O Sars
Target species:	Capelin	Secondary species:	Herring
Area:	Southern Barents Sea		
Purpose:	Abundance and distribution of capelin larvae, hydrography, plankton		
Reported to:	Internal survey report IMR, WGNPBW 2004.		

Nation:	Norway	Survey title:	Herring spawning area
Time period:	12.02 – 01.03	Vessel:	Håkon Mosby
Target species:	Herring	Secondary species:	
Area:	Herring spawning areas off Norwegian coast		
Purpose:	Spawning migration and behaviour		
Reported to:	Internal IMR survey report WGNPBW 2003		

Nation:	Norway	Survey title:	Herring larvae
Time period:	05.04 – 20.04	Vessel:	Håkon Mosby
Target species:	Herring	Secondary species:	Saithe
Area:	Norwegian shelf areas from Andenes to Karmøy		
Purpose:	Distribution and abundance of herring larvae		
Reported to:	Internal IMR survey report, WGNPBW 2003		

Nation:	Norway	Survey title:	Norwegian Sea survey
Time period:	23.04 – 10.06	Vessel:	G.O. Sars
Target species:	Herring, Blue whiting	Secondary species:	Zooplankton
Area:	Norwegian Sea		
Purpose:	Acoustic abundance estimation of pelagic fish and plankton.		
Reported to:	Internal IMR survey report, WGNPBW 2004, ICES PGSPFN 2003		

Nation:	Norway	Survey title:	Northern Norwegian Sea survey
Time period:	27.07 – 15.08	Vessel:	G.O. Sars
Target species:	Herring, 0-group fish	Secondary species:	Blue whiting, Zooplankton
Area:	Northern Norwegian Sea		
Purpose:	Distribution of herring and 0-group fish abundance		
Reported to:	WGNPBW 2004, ICES PGSPFN 2003, Joint IMR/PINRO Report Series		

Nation:	Norway	Survey title:	Fjord and coastal survey
Time period:	13.10 – 11.11	Vessel:	Jan Mayen
Target species:	Saithe, coastal cod, 0-group herring	Secondary species:	Haddock, Sebastes marinus
Area:	North Norwegian fjord and coastal areas.		
Purpose:	Acoustic and trawl abundance estimation of saithe and coastal cod. Acoustic abundance estimation of 0-group herring. Environmental investigations		
Reported to:	Internal IMR survey report, WBNPBW 2004, AFWG 2004		

Nation:	Norway	Survey title:	Fjord and coastal survey
Time period:	04.11-02.12	Vessel:	Håkon Mosby
Target species:	Sprat, 0-group herring	Secondary species:	
Area:	South Norwegian fjord and coastal areas.		
Purpose:	Acoustic abundance estimation of sprat and 0-group herring. Environmental investigations		
Reported to:	Internal IMR survey report, WBNPBW 2004.		

Nation:	Norway	Survey title:	Herring wintering area
Time period:	29.11 – 19.12	Vessel:	Johan Hjort
Target species:	Herring	Secondary species:	
Area:	Vestfjorden		
Purpose:	Acoustic abundance estimation of herring		
Reported to:	Internal IMR survey report, WGNPBW 2004		

Nation:	Norway	Survey title:	Herring wintering area
Time period:	28.11 – 17.12	Vessel:	G O Sars
Target species:	Herring	Secondary species:	
Area:	Vestfjorden		
Purpose:	Intercalibration of acoustic equipment		
Reported to:	Internal IMR survey report,		

Nation:	Norway	Survey title:	Tagging of herring
Time period:	10.11 – 01.12	Vessel:	Hired vessel
Target species:	Herring	Secondary species:	
Area:	Vestfjorden		
Purpose:	Tagging of herring		
Reported to:	Internal IMR survey report, WGNPBW 2004		

Pelagic fish – Russian investigations

Nation:	Russia	Survey title:	Capelin, herring
Time period:	05.01-10.03	Vessel:	R/V Kapitan Shaytanov
Target species:	Capelin, herring	Secondary species:	Other pelagic species
Area:	Barents Sea including Norwegian Economic Zone		
Purpose:	Assessment of spawning capelin and herring recruitment.		
Reported to:	Internal survey report, ICES, WGNPBW 2003.		

Nation:	Russia	Survey title:	Herring survey
Time period:	15.05-30.05	Vessel:	R/V Fridtjof Nansen
Target species:	herring	Secondary species:	Other pelagic species
Area:	Barents Sea including Norwegian Economic Zone		
Purpose:	Assessment of herring fry abundance and distribution in the Barents Sea.		
Reported to:	Internal survey report, ICES, WGNPBW 2003.		

Nation:	Russia	Survey title:	Distribution and migration of spawning and post-spawning herring
Time period:	01.02-30.03	Vessel:	R/V Vilnus
Target species:	herring	Secondary species:	Other pelagic species
Area:	The Norwegian Sea		
Purpose:	Data collection on length and age structure for herring at the spawning areas		
Reported to:	Internal survey report, ICES WGNPBW		

Nation:	Russia	Survey title:	Distribution and migration of spawning and post-spawning herring
Time period:	01.02-31.03	Vessel:	Hired vessel
Target species:	herring	Secondary species:	Other pelagic species
Area:	The Norwegian Sea		
Purpose:	Acoustic survey for herring at spawning areas		
Reported to:	Internal survey report, ICES WGNPBW		

Nation:	Russia	Survey title:	International survey for herring in the Norwegian Sea
Time period:	31.05-31.07	Vessel:	R/V Fridtjof Nansen
Target species:	herring	Secondary species:	Other pelagic species
Area:	The Norwegian Sea		
Purpose:	Stock assessment		
Reported to:	Internal survey report, ICES WGNPBW		

Nation:	Russia	Survey title:	Distribution and migration feeding aggregations of herring
Time period:	15.08-30.09	Vessel:	Hired vessel
Target species:	herring	Secondary species:	Other pelagic species
Area:	The Norwegian Sea		
Purpose:	Acoustic survey for feeding aggregation of herring		
Reported to:	Internal survey report, ICES WGNPBW		

Nation:	Russia	Survey title:	Capelin
Time period:	01.11-31.12	Vessel:	One hired trawler
Target species:	Capelin	Secondary species:	Other pelagic species
Area:	The Barents Sea		
Purpose:	Continuation of the annual time series on distribution, length-age composition and feeding. Forecasting on the prespawning and spawning migrations for 2004		
Reported to:	Internal survey report, ICES, WGNPBW		

Pelagic fish – joint investigations

Nation:	Norway/Russia	Survey title:	Blue whiting spawning survey
Time period:	29.03 – 28.04 21.03-25.04 10.03-05.05	Vessel:	Johan Hjort Russian research vessel Kaptain Shaytanov
Target species:	Blue whiting	Secondary species:	Other pelagic species
Area:	West of the British Isles		
Purpose:	Abundance estimation and distribution of spawning blue whiting		
Reported to:	Internal IMR and PINRO survey reports, WGNPBW 2003		

Nation:	Norway/Russia	Survey title:	Capelin/Polar cod
Time period:	10.09-01.10 08.09-15.09 10.09- 09.10 10.09 – 09.10	Vessel:	Johan Hjort G.O. Sars Smolensk Fridtjof Nansen
Target species:	Capelin, Polar cod	Secondary species:	Herring
Area:	Barents Sea and adjacent waters		
Purpose:	Abundance and distribution of Capelin and Polar cod, hydrography, plankton		
Reported to:	Joint IMR/PINRO Report Series, WGNPBW 2004		

0-group fish-joint investigations

Nation:	Norway/Russia	Survey title:	0-group survey
Time period:	25.07 – 15.09 05.08 – 01.10 10.08 – 09.09 10.08 – 09.09	Vessel:	G.O. Sars Johan Hjort Fridtjof Nansen Smolensk
Target species:	Cod, Haddock, Redfish, Greenland halibut, Capelin, Herring	Secondary species:	Saithe, Polar cod, Long rough dab, Sandeel, Catfish, Gonatus sp
Area:	Barents Sea and adjacent waters		
Purpose:	Distribution and abundance of 0-group fish		
Reported to:	Joint IMR/PINRO Report Series, AFWG 2004,WGNPBW 2004		

4. Red King crab

Investigations on the Red King crab (*Paralithodes camtschaticus*) of the Barents Sea during the period 2002-2004

A three year joint research program is agreed between the two parties (see protocol of joint scientist meeting March 2002).

SYMPOSIUM ON THE RED KING CRAB

The Norwegian Part will arrange a symposium on the crab as an introduced species during June 2003. A preliminary schedule for the symposium is given below:

International symposium on the red king crab in the Barents Sea

Working title: Management of the Barents Sea king crab
- Ecological and socioeconomic questions due to this introduced species

Main topics

- Ecological impacts of the Red King crab
- Economical significance in fisheries
- Changes and challenges in the performance of the fishery
- By-catches in other fisheries
- Biological knowledge of the Red King crab
- Management challenges

Time

11^{th} – 13^{th} June 2003

Place

Tromsø or Kirkenes

Organizer:

IMR, Tromsø

Stakeholders and contributors

- Russian and Norwegian scientists
- Other scientists on introduced species (ICES SG-Ballast water)
- Managers and bureaucrats
- Norwegian and Russian fishermen

The survey program for 2003 is given below

Red King crab (Paralithodes camtchaticus) – Norwegian investigations

Nation:	Norway	Survey title:	Red King crab survey
Time period:	15.08 – 15.09	Vessel:	Johan Ruud
Target species:	Red King crab	Secondary species:	
Area:	Fjords in Finnmark		
Purpose:	Abundance estimation		
Reported to:	Internal IMR survey report. PINRO		

Red King crab (Paralithodes camtschaticus) – Russian survey:

Nation:	Russia	Survey title:	Red King crab
Time period:	05.04-05.05	Vessel:	Rented vessel
Target species:	Red King crab	Secondary species:	
Area:	Russian Economic Zone and territorial waters		
Purpose:	Study of Red King crab during spawning, molting. Study of crab juveniles and benthos, tagging.		
Reported to:	ICES AFWG		

Nation:	Russia	Survey title:	Red King crab
Time period:	15.08-15.09	Vessel:	Rented vessel
Target species:	Red King crab	Secondary species:	
Area:	Russian Economic Zone and territorial waters		
Purpose:	Red King crab distribution, stock assessment, tagging.		
Reported to:	PINRO, IMR		

Nation:	Russia	Survey title:	Benthos survey
Time period:	01.06.-31.07.	Vessel:	rented vessel
Target species:	benthos	Secondary species:	benthos
Area:	Russian Economic Zone and territorial waters		
Purpose:	Mapping and assessment of the current status of the zoobenthos bottom communities		
Reported to:	Internal survey report		

5. Selectivity of fishing gears

Norwegian investigations:

Nation:	Norway	Survey title:	Selectivity in norsel gillnets
Time period:	10.03 – 22.03	Vessel:	Hired vessel
Target species:	Demersal fish and Red King crab	Secondary species:	
Area:	West- Finnmark		
Purpose:	Comparison of selectivity in norsel net and standard gill net		
Reported to:	Internal IMR survey report		

Nation:	Norway	Survey title:	Selectivity for lumpsucker in norsel gillnets
Time period:	26.05 – 08.06	Vessel:	Hired vessel
Target species:	Lumpsucker	Secondary species:	
Area:	Varangerfjord		
Purpose:	Study the usefulness of norsel gillnets for catching lumpsucker		
Reported to:	Internal IMR survey report		

Nation:	Norway	Survey title:	Selection effects in trawl gear devices
Time period:	22.04 – 07.05	Vessel:	Hired Vessel
Target species:	Demersal species	Secondary species:	
Area:	Coast of Finnmark		
Purpose:	Selection effects in trawl meshes and sorting grids		
Reported to:	Internal IMR survey report		

Nation:	Norway	Survey title:	Escapement of juvenile fish during shrimp trawling
Time period:	17.02 – 03.03 03.11 – 17.11	Vessel:	Hired Vessel
Target species:	Demersal species, shrimp	Secondary species:	
Area:	Fjords in Northern Norway		
Purpose:	Quantify escapement of juvenile fish during shrimp trawling.		
Reported to:	Internal IMR survey report		

Russian investigations:

Nation:	Russia	Survey title:	Selectivity
Time period:	July-September	Vessel:	rented longliner, rented trawler
Target species:	Greenland halibut	Secondary species:	Other demersal species
Area:	The Barents Sea, Norwegian Economic Zone and Svalbard		
Purpose:	Selectivity estimation of trawl bags with 135 – 155 mesh size, comparison trawl-longline		
Reported to:	Internal survey report, ICES AFWG		

Nation:	Russia	Survey title:	Selectivity
Time period:	March-June July-December	Vessel:	2 rented vessels
Target species:	Cod, haddock	Secondary species:	Other demersal species
Area:	The Barents Sea		
Purpose:	Estimate efficiency of implementation of improved plastic sorting grids in comparison with soft system and steel grids during fishing of cod and haddock. Mesh size in trawl bag is 135 – 155 mm.		
Reported to:	Internal survey report.		

6. Multispecies interactions in the Barents Sea

The parties will:

- Continue work to establish a joint Norwegian-Russian database on stomach content of marine organism, including sea mammals, in the Barents Sea;
- Continue work to exchange biological data and data on fisheries for multispecies modelling;
- Continue work on multispecies modelling;
- Agree on a program for exchange of scientists;
- Establish a fundament for including marine mammals in the multispecies models for the population dynamics of the most important commercial species in the Barents Sea;
- Consider the possibility to use plankton data in the Barents Sea multispecies models.

The points above will be discussed at the scientific meeting in March 2003.

7. Oceanographical investigations

Oceanographical investigations will continue in the Barents Sea and Norwegian Sea in accordance with the existing international, bilateral and national programmes. Data on temperature and salinity from the joint investigations will be presented at the scientific meeting in March 2003. The data will be exchanged after correction and quality assurance.

8. Monitoring of pollution levels in the Barents Sea

PINRO and IMR will continue to monitor pollution levels in accordance with national programmes. Scientists from PINRO and IMR will discuss and exchange scientific information during the meeting in March 2003. The investigations are based on material collected during the surveys in the Barents Sea.

9. Investigations on age and growth of fish

The cooperation between PINRO and IMR to establish an international database on length-at-age and weight-at-age of fish from scientific surveys and commercial catches will continue. This also includes commercial fisheries catch statistics archived at PINRO and IMR.
The exchange of age reading specialists and material will continue in 2003 according to established routines. In 2003, there will be two meetings of age reading specialists, one in spring in Bergen on cod, haddock and Greenland halibut, and one in autumn in Murmansk on capelin. Exact timing of the meetings will be decided by correspondence.

10. Marine mammals

Studies of the biology and ecology of the harp seal is planned during the commercial hunt in the Southeastern Barents Sea.

Futhermore biological and ecological studies of harp seals will be conducted in open waters of the Barents Sea during summer.

Monitoring of minke whale diets will be conducted in the North Sea , at Spitsbergen and coast of Finnmark, preferably also in REZ if permission is given by Russian authorities.

Photoidenfication studies of Humpback whales will be performed in the Barents Sea.

In 2003 increased effort will be spent on abundance estimation of grey and harbour seals on the Norwegian coast. Also ecological studies of grey seals will be conducted.

Norwegian investigations:

Nation:	Norway	Survey title:	Grey seal survey
Time period:	01.03-10.03	Vessel:	Hired vessel
Target species:	Grey seal	Secondary species:	
Area:	Norwegian coast from Vega to Lofoten		
Purpose:	Ecological studies of grey seals		
Reported to:	Internal IMR survey report, ICES, NAMMCO		

Nation:	Norway	Survey title:	Grey seal survey
Time period:	10.10-31.10	Vessel:	Hired vessel
Target species:	Grey seal	Secondary species:	
Area:	Norwegian coast from Vega to Lofoten		
Purpose:	Abundance estimation of grey seals		
Reported to:	Internal IMR survey report, ICES, NAMMCO		

Nation:	Norway	Survey title:	Grey seal survey
Time period:	10.11-25.11	Vessel:	Hired vessel
Target species:	Grey seal	Secondary species:	
Area:	Norwegian coastal areas in Troms - Finnmark		
Purpose:	Abundance estimation of grey seals		
Reported to:	Internal IMR survey report, ICES, NAMMCO		

Nation:	Norway	Survey title:	Grey seal survey
Time period:	05.12-10.12	Vessel:	Hired vessel
Target species:	Grey seal	Secondary species:	
Area:	Norwegian coastal areas in Finnmark		
Purpose:	Abundance estimation of grey seals		
Reported to:	Internal IMR survey report, ICES, NAMMCO		

Nation:	Norway	Survey title:	Minke whale survey
Time period:	23.06-03.08	Vessel:	Hired Vessel
Target species:	Minke whale	Secondary species:	
Area:	Spitsbergen		
Purpose:	Counting program for estimation of minke whales in the North East Atlantic area.		
Reported to:	Internal IMR survey report HI, IWC, ICES, NAMMCO		

Nation:	Norway	Survey title:	Minke whale survey
Time period:	15.05-15.06	Vessel:	Hired Vessel
Target species:	Minke whale	Secondary species:	
Area:	Norwegian Sea, North Sea, Spitsbergen area, coast of Finnmark.		
Purpose:	Biological sampling of minke whales.		
Reported to:	Internal IMR survey report HI, IWC, ICES, NAMMCO		

Nation:	Norway	Survey title:	Humpback whale survey
Time period:	01.09-21.09	Vessel:	Hired Vessel
Target species:	Humpback whale	Secondary species:	
Area:	Norwegian and Barents Seas		
Purpose:	Photoidentification of humpback whales.		
Reported to:	Internal IMR survey report HI, IWC, ICES, NAMMCO		

Russian investigations:

Nation:	Russia	Survey title:	Harp seal
Time period:	25.02-10.05	Vessel:	rented helicopter
Target species:	Harp seal	Secondary species:	
Area:	The White Sea		
Purpose:	Stock assessment, study of distribution, age structure and reproduction of harp seal in the White Sea. Collection of biological data for harp seal in pupping and moulting period.		
Reported to:	ICES, NAMMCO		

Nation:	Russia	Survey title:	Harp seal
Time period:	08.03-17.03	Vessel:	rented helicopter
Target species:	Harp seal	Secondary species:	
Area:	The White Sea		
Purpose:	Stock assessment, study of distribution, age structure and reproduction of harp seal in the White Sea. Harp seal pups survey.		
Reported to:	ICES, NAMMCO		

Joint investigations:

Nation:	Norway/Russia	Survey title:	Harp seal survey
Time period:	01.06 – 01.08	Vessel:	Two hired vessels (one Norwegian and one Russian)
Target species:	Harp seal	Secondary species:	
Area:	Barents Sea		
Purpose:	Ecological studies of harp seals		
Reported to:	Internal IMR survey report, ICES, NAMMCO		

Nation:	Norway/Russia	Survey title:	Scientific whaling
Time period:	May-June	Vessel:	Commercial vessels
Target species:	Minke whale	Secondary species:	
Area:	Murman coast		
Purpose:	Biological and ecological investigations of minke whales.		
Reported to:	Internal IMR survey report, IWC, ICES, NAMMCO, PINRO,SevPINRO		

11. Investigations on hydro-acoustic methodology

A Russian-Norwegian Workshop on Acoustic Methodology is going to be held in Murmansk, 11-14 November 2003.

The main topics for the workshop should be

- target strength,
- combination of fish density estimates from acoustics and bottom trawl.

Detailed planning of the workshop will be done during the annual scientist meeting in March 2003. Other institutes in Russia and Norway should be invited to take part in the workshop.

12. Norwegian – Russian Symposium

The 10th Norwegian – Russian symposium will be held in Bergen – Norway, 27-29 August 2003, under the title "Management strategies for commercial marine species in northern ecosystems". Detailed program for the symposium will be finalized during the joint scientist meeting in Murmansk, March 2003. See draft announcement for the symposium below:

ANNOUNCEMENT

For
The 10th Norwegian-Russian Symposium
On

MANAGEMENT STRATEGIES FOR COMMERCIAL MARINE SPECIES IN NORTHERN ECOSYSTEMS

Bergen – Norway, 27-29 August 2003

Organized by
The Institute of Marine Research (IMR), Bergen – Norway,
and
The Polar Research Institute of Marine Fisheries and Oceanography (PINRO), Murmansk, Russia.

Participation
The symposium will address scientists, fishery managers and representatives from the fisheries industry.

Scope
The symposium will focus on management strategies for the most important commercial stocks in the Barents Sea ecosystem. However, presentations of management strategies for exploited stocks in other northern marine ecosystems will be emphasised. The program will be based on presentations by invited speakers.

Co-conveners:
Åsmund Bjordal, Research director IMR, and
Aleksander Boltnev, Director (PINRO).

Symposium program committee:

From Norway:	From Russia:
Å. Bjordal	A. Boltnev
H. Gjøsæter	V. Borisov
S. Mehl	S. Dyagilev
NN (Fish management representative)	K. Drevetnyak

Local organizing committee:
Åge Høines
Elen Hals
Kari Østervold Toft
Monica von Minden

Deadlines:

Pre-registration:	15 January 2003
Final program:	15 April 2003
Final registration:	15 May 2003

13. Catch volumes needed for investigations of marine resources and monitoring of the most important commercial species, as well as management tasks.

To support and facilitate scientific investigations and stock monitoring, similar catch volumes of fish for Norway and Russia. The agreed catch volumes shall satisfy the need for conducting all tasks described in "Program for joint Norwegian-Russian research on living marine resources in 2003", included surveillance activities for the recommendation of area closures (and reopening of areas) as well as other decisions on management of fishing activities on living marine resources in ICES area I and II.

For these tasks, the following annual catch quantities are decided for each party in 2003:

- Maximum 27.500 tons of Northeast arctic cod and other demersal fish species (except Greenland halibut), included the quantities given in Appendix 3, footnote 3 in the protocol 31st session of the Joint Norwegian – Russian Fisheries Commission.
- Maximum 3.000 tons Greenland halibut.

The Norwegian party can use parts of this quantity for commercial fishing, given that the data from the fishery is used for research purposes.

The State Committee for Fisheries of the Russian Federation and the Royal Norwegian Ministry of Fisheries will inform each other about vessels, periods and limitations on catch quantities at least one week before the fishing activity starts.

All catches for research- and management purposes shall be given separately in the catch statistics

14. Establishing conversion factors

During the meeting of the "Norwegian-Russian Permanent Committee for Management and Control Issues in the Fisheries Sector" in Murmansk 30 September – 5 October 2002 (see Appendix 9) it was decided to conduct a joint Russian-Norwegian survey in 2003 on board a Russian vessel to collect data as basis for establishing correct conversion factors for haddock.

Joint investigation:

Nation:	Norway/Russia	Survey title:	Haddock conversion factors
Time period:	To be decided by correspondence	Vessel:	One Russian trawler
Primary species:	Haddock	Secondary species:	Other demersal species
Area:	To be decided by correspondence		
Purpose:	Establish conversion factors for haddock		
Reported to:	Permanent Committee, VNIRO, PINRO, Norwegian Directorate of Fisheries		

Kabelvåg, 08.11.02

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Final version, November, 2002.

BASIC PRINCIPLES AND CRITERIA FOR LONG TERM, SUSTAINABLE MANAGEMENT OF LIVING MARINE RESOURCES IN THE BARENTS AND NORWEGIAN SEAS

1. INTRODUCTION

According to the decision made at the 30th Session of the Joint Russian-Norwegian Fisheries Commission on the development of a Basic Document Regarding the main Principles and Criteria for Long Term, Sustainable Management of Living Marine Resources in the Barents and Norwegian Seas, the Parties

- referring to the United Nations Law of the Sea (1982) and The Agreement for the implementation of the provisions of the United Nations Convention on the Law of the Sea relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (1995), FAO Code of Conduct for Responsible Fisheries (1995), as well as to the other relevant agreements on the marine law,

- allowing for a long term cooperation and bilateral agreements in fisheries, in particular of the Russian-Norwegian Agreement on Cooperation in Fisheries of 11 April, 1975, as well as the Russian-Norwegian Agreement on Mutual Relations in Fisheries of 15 October, 1976,

- considering that the jointly exploited living resources of the Norwegian and Barents seas are part of an integral ecological complex
- being committed to secure long-term conservation and sustainable exploitation of living marine resources, and to improve the co-operation with this aim,

- following the principles of responsible fisheries, management and understanding the necessity to avoid the negative influence on the marine environment, to sustain the integrity of marine ecosystems and to minimize the risk of long-term or irreversible consequences of fisheries,

- allowing for the necessity to develop the national fisheries and potential fisheries possibilities aimed at the full and rational exploitation of fish resources,

- considering the absence of common, clearly expressed principles and criteria of the sustainable long-term management of such resources,

- recognizing that stocks may vary due to both natural factors which cannot be regulated and to fisheries that can be regulated,

agreed to formulate common principles and criteria of sustainable long-term management of fisheries which can be used by managers of Russia and Norway when developing annual

measures of regulation of fishery for jointly harvested stocks of the Barents and Norwegian Seas.

This document should be regarded as a tool to conduct a rational management of living marine resources in the Norwegian and Barents seas. It should however, be emphasized that the document could be improved further at the request of the Joint Russian-Norwegian Fisheries Commission.

2. TERMS AND DEFINITIONS

In this document there are terms referring to biology, fisheries economics and management which are in need of precisely and adequate definitions. Such definitions are needed to achieve a common understanding between scientists, managers and fishermen:

Cost of regulation: cost of research, elaboration and introduction of regulatory measures and corresponding monitoring, control and enforcement.

Ecosystem based fishery management: management of fisheries based on best available knowledge of the relevant exploited populations, with the aim to conduct the fishing operation in a way that creates the least possible negative effect on the ecosystem.

Harvest control rule: a set of parameters (fishing mortality, total allowable catch (TAC), fishing effort etc) annually adopted by managers in order to implement a certain stock management strategy. Applied to fluctuating fish stock, a harvest control rule based on a constant fishing mortality will imply fluctuating levels of TAC whereas a harvest control rule based on TAC or catch ceilings or maximum deviations in catch from year to year will imply a higher degree of catch stability. The choice of harvest control rule will generally reflect a trade-off between important objectives.

Limit biological reference points: minimum level of spawning stock biomass (SSB) and maximum level of fishing mortality (F) that should not be crossed in order to apply the precautionary approach to fisheries management.

Population: a long existing ecologically separated group of individuals of one species where gene exchange within the group is predominant due to its reproductive isolation. In fisheries terms population normally means stock. Temporarily separated from one another groupings (by size, age, feeding grounds, gonad stages) which having reached maturity share a common spawning area, constitute just parts of a whole population.

Precautionary approach to fisheries management: exercise prudent foresight to avoid unacceptable or undesirable situations, taking into account that changes in fisheries are only slowly reversible, difficult to control, not well understood, and subject to change in the environment and human values.

Safe biological limits: reference points established by scientists after conducting retrospective analysis of the dynamics in a given fish stock (usually on the basis of SSB and F). Such analysis makes it possible to assess the present and expected development of the stock and recommend specific catch levels. Safe biological limits imply a high probability that;

- SSB shall be above the level where the recruitment is impaired
- F shall be below a level where SSB either is maintained at – or expected to increase to a level above which recruitment is not impaired.

Shared stocks: are stocks that occur within the exclusive economic zones of two or more coastal states.

Stock and recruitment: is the relationship between the size of the (parent) spawning stock and the number of recruits joining that stock in later years. The probability is that a depleted stock will produce fewer recruits than an abundant stock of the same species but in a number of cases this relationship does not clearly manifest itself. However, the stock-recruitment relationship serves a theoretical ground for elaboration and application of the principle of precautionary approach in the practice of fish stocks management.

Sustainable fisheries management: is the conservation and utilization of living marine resources, and the orientation of technological and institutional change in such a manner as to ensure the attainment and continued satisfaction of human needs for present and future generations.

3. MANAGEMENT OBJECTIVES

The FAO Code of Conduct for Responsible Fisheries formulates objectives to ensure effective conservation, management and development of living aquatic resources with due respect for the ecosystem and bio-diversity in order to provide, both for present and future generations, a vital source for food, employment, recreation, trade and economic well being for people. These objectives are agreed and universally accepted by all fishing nations.

However, the objectives given in the FAO Code of Conduct are often too general to be applied directly in practical management work. At the same time, both Norway and Russia have concrete objectives for their national fisheries policy.

Many of the current problems in managing the fish stocks are due to lack of, or more commonly, low precision of the management objectives. This basic document defines four management objectives that may be relevant to the shared stocks in the Barents and Norwegian Seas. The suggested management objectives are given below in a non-prioritised order:

(i) to attain **high sustainable catches** from exploited stocks in the ecosystems of the Barents and Norwegian seas without decreasing their productivity.

Important element within this objective

- Total allowable catch (TAC) of each exploited stock should not worsen its reproduction. The TAC should follow annual variations in stocks.

(ii) **to keep exploited stocks within safe biological limits** while maintaining the biodiversity and productivity of marine ecosystems.

Important elements within this objective

- Exploited marine stocks should be considered as a component of marine ecosystems which are object to changes under the influence of both natural and man-induced factors.

- The ecosystem approach when establishing TAC for the exploited stocks considers the inter-species relationships, "predator-prey" relations, changes of climatic regime and others.

(iii) to ensure **sustainable development of the fisheries industry** while exploiting the stocks within safe biological limits;

Important elements within this objective

- Regulation of fishing fleet in the area. At present there is an overcapacity of fleet that cause the decrease of catch per unit effort, decrease of profit and difficulties in the fisheries industry with the corresponding social problems in the coastal regions.

- Within safe biological limits, harvest control rule should be established with the aim to reduce variations in TAC from year to year.

(iv) to attain **sustainable social development** of maritime regions.

Important element within this objective

- To further develop fisheries to contribute as an important industry in the national economy (source of food, export earnings) and to sustain work and income for the population in coastal communities.

4. PRINCIPLES AND SCIENTIFIC BASIS FOR MANAGEMENT DECISIONS

4.1 Management obligations

As a basis for the management of the fisheries on the shared stocks managers should:

a) base their work on scientific recommendations and advice, in particular from ICES. However, the managers could maintain their right to independent decisions, taking account of the socio-economic aspects and other relevant aspects prevailing for the two Parties.

b) follow the provision for a responsible fishery as expressed in the FAO Code of Conduct for Responsible Fisheries, as well as:

- ensure that fisheries management measures are based on the best scientific data available and directed to maintaining and rebuilding the stocks at or to the levels at which maximum sustainable yield can be assured;

- apply the Precautionary approach;

- cooperate in developing common measures, which regulate exploitation of shared stocks, having regard to:

  - biological and ecological characteristics of a stock with regard to the specificity of its distribution area and stages of its individuals;

- the relationship between stock distribution, fisheries and geographic features of a region, including occurrence of the stock and intensity of its harvesting in areas under national jurisdiction;
- pre-agreed measures for management and conservation of the stock, adopted for and applied in the region in question;
- established biological allowable levels and structure of harvest.

4.2 Research activities as a basis for management decisions

A solid scientific basis is necessary for the management of the fisheries in the Norwegian and Barents Seas. Below is a list of necessary data in the field of biological research for stock assessment, catch statistics and bio-economic analysis of fishery and marketing.

In order to improve management advice given by ICES, the parties should co-operate to

a) Make available retrospective analyses, analyses of the actual situation and prognoses of every exploited fish stock and on the environmental situation in this area.

b) Acknowledge the understanding that research into the fields of ichthyology, hydrobiology and oceanography is not only important as such, but also because they are a basis for a broader understanding of processes in the ecosystems and within the economical, technological, social and political areas.

c) Monitor long-time series of the environmental conditions (continuation of investigation on dynamic of temperature on standard sections, current intensity, polar front, year and seasonal variations in the biomass of plankton and other prey organisms).

d) Continue and possibly expand investigation on recruiting year classes to the fish stocks.

e) Carry out systematic surveys by use of hydroacoustic and trawl methodology that cover the largest possible part of the total distribution area of the exploited stocks.

f) Conduct biological analyses, which include age reading, length and weight increases, composition of prey in stomachs and fat content, based both on scientific surveys and commercial catches.

g) Make analyses of catch efficiency and selectivity of different fishing gears and on analyses of time series of catch per unit effort.

h) Make analyses and develop effective technical measures for protecting fry and immature individuals of exploited stocks.

i) Improve the existing models and develop new ones that incorporate quantitative interrelations between stocks and between stocks and the environment.

j) Obtain reliable catch statistics and to find ways for quantifying discards, unreported catches and by-catches.

k) Carry out investigations to map the species composition of the ecosystems as a basis for biodiversity analyses.

l) Proceed with accumulation and analyses of national and joint reliable scientific information on biology, stock structure and interspecies relations.

m) Survey economic indicators of relevance to the economics in the fisheries, such as prices and harvesting costs. Account for historic and social values of fisheries for maritime regions.

5. DECISION-MAKING CRITERIA

The main objectives for rational fishery management are to seek highest sustainable catches, to keep exploited stocks within safe biological limits, to ensure a sustainable development of fishing industry and a sustainable social development. This implies that the objectives shall attain highest possible yield and economic benefit on the one hand and on the other hand low risk of stock depletion. Since these objectives may be conflicting **in the short term**, managers are required to find a balance between conflicting interests.

The Joint Russian-Norwegian Fisheries Commission needs to apply a **long term strategy** which can lead to the fulfilment of the objectives given the highest priority.

Management objectives are often general and in reality difficult to measure. When evaluating a specific management strategy, there is therefore a need for some indicators, which can be measured and which could be said to represent the various objectives in a fairly accurate manner.

In the table below, some measurable indicators for each of the objectives stated above are suggested. The advantage of the indicators is that they present information available from annual stock assessments. These indicators are, however, not perfect, and in the future, there is clearly a need to replace some of them with more accurate indicators, a process, which first and foremost stresses the need for more knowledge and better prognoses.

The table is organised such that Column 1 gives certain levels of F and TAC and the remaining columns show how these perform according to the different objectives.

- To represent the objective "**to keep exploited stocks within safe biological limits**" focus is set on indicators showing expected development of the exploited stock in a medium-term perspective. Three indicators are chosen; the expected spawning stock biomass (SSB) in a medium term perspective (Column 2), the probability that this SSB should fall below the reference point Bpa (Column 3) and the expected total stock biomass (TSB) in 2006 (Column 4).
- To represent the objective "**high sustainable catches**" an indicator showing the average level of the total allowable catch in a medium term perspective is suggested. This indicator is shown in Column 6.
- To represent the objectives "**sustainable development of fishing industry**" and "**sustainable social development**" two indicators are chosen. These are; the level of TAC next year (Column 5) and the difference between the highest and lowest TAC during the forecasted period (Column 7).

1	2	3	4	5	6	7
Harvest control rule (parameters)	SSB 2006	P(SSB<Bpa) 2006	SB 2006	TAC 2003	Average TAC and Sum of TAC (2003-2006)	Difference in TAC during 2003-2006 (max-min)
F = a						
F = b						
F = c						
F =a, and TAC<nn tonnes						
F = b, and TAC<nn+ tonnes						
Et cetera						

- Bpa = Precautionary level of spawning stock biomass
- P = probability
- SB = Stock Biomass
- SSB = Spawning stock biomass
- TAC = Total allowable catch (annual)