

Translation from Norwegian

Manual for fishery experts on board seismic survey vessels on the Norwegian Continental Shelf



NORWEGIAN PETROLEUM
DIRECTORATE



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Introduction

This manual has been issued by the Norwegian Petroleum Directorate with assistance from the Norwegian Directorate of Fisheries. The manual is aimed at fishery experts on board vessels conducting seismic surveys to identify petroleum resources on the Norwegian Continental Shelf.

The manual should also be used by fishery experts participating in scientific surveys and various types of track surveys and other subsurface surveys involving seismic data acquisition.

The manual sets guidelines for how fishery experts should perform their role and provides information about scope of authority, statutory requirements and the relevant permits and licences. Important addresses and telephone numbers have also been included. Furthermore, the manual contains a standard for the fishery expert's log-keeping.

Information relating to fishing tools and equipment used in Norwegian waters has been prepared by the Norwegian Directorate of Fisheries.

The fishery expert plays a major role in actively ensuring that the petroleum industry and the fishing industry carry out their offshore activities in good coexistence. The fishery expert has an advisory function and shall offer professional independent advice on fishery-related matters.

The manual must be brought on all seismic surveys.

1. Scope of authority

Seismic surveys are subject to reporting to the Norwegian Petroleum Directorate. The seismic survey must be reported before the survey can take place and the following institutions may provide input:

- The Norwegian Directorate of Fisheries (expert assessment of expected fishery activity)
- The Norwegian Armed Forces (military activities)
- The Institute of Marine Research (resource biological perspective)

Copies of statements relating to the notifications of surveys must be readily available on the seismic vessel. These are also available on the Norwegian Petroleum Directorate's web page (www.npd.no) .

The Norwegian Petroleum Directorate:

The Norwegian Petroleum Directorate (NPD) is an independent state administration body reporting to the Ministry of Petroleum and Energy. The NPD shall have the best possible knowledge of the petroleum resources on the Norwegian Continental Shelf and ensure that the licensees manage the resources in a prudent and efficient manner. The paramount objective of the NPD is to contribute to creating the greatest possible values for society from the oil and gas activities by means of prudent resource management based on safety, emergency preparedness and safeguarding of the external environment. The NPD has a national responsibility for ensuring that data and information from the petroleum activities are made available to the general public, businesses, research communities and others. The NPD functions as an advisor to the Ministry of Petroleum and Energy on issues relating to the petroleum industry. The NPD headquarters are in Stavanger, with a regional office in Harstad.

The Directorate of Fisheries:

The Directorate of Fisheries is a specialist agency under the Ministry of Fisheries and Coastal Affairs, and acts as the authorities' advisory and executive body in matters pertaining to fishing and the management of aquaculture in Norway. Its main goal is to promote profitable economic activity through sustainable and user-oriented management of marine resources and the marine environment. Moreover, the Directorate shall safeguard considerations for the fisheries in matters pertaining to competitive use of our seas. Its head office is in Bergen, but the Directorate also has seven regional offices. These seven regional offices divide the geographical responsibility for the processing of seismic surveys into three regions. Region South of 62 degrees north, Region Møre og Romsdal, between 62 and 67 degrees north and Region Troms, north of 67 degrees north.

The Norwegian Coast Guard:

The Norwegian Coast Guard is part of the Norwegian Royal Navy and was founded in 1977 in connection with the establishment of the Norwegian 200-nautical mile exclusive economic zone. The Coast Guard is the Norwegian State's main authority at sea and performs its activities throughout the entire Norwegian area of responsibility. The Norwegian Coast Guard maintains sovereignty and exercises resource control in waters under Norwegian jurisdiction, thus cooperating closely with Norwegian fisheries authorities. The Coast Guard is divided into two squadrons, Squadron North in Sortland and Squadron South in Bergen. The geographical division between the two squadrons follows 65 degrees north. The Coast Guard Report Centre for the reporting of fixed fishing gear is located at the Coast Guard Squadron North.

The cooperation agreement between the Directorate of Fisheries, the Coast Guard and the Norwegian Petroleum Directorate

The Directorate of Fisheries, the Coast Guard and the Norwegian Petroleum Directorate have entered into a joint cooperation agreement. Through the agreement, the authorities will ensure that the fishery expert and other relevant parties have access to round-the-clock government assistance in the event of an incident or other needs.

The Norwegian Petroleum Directorate is responsible for the further case processing and will register reported incidents and situations.

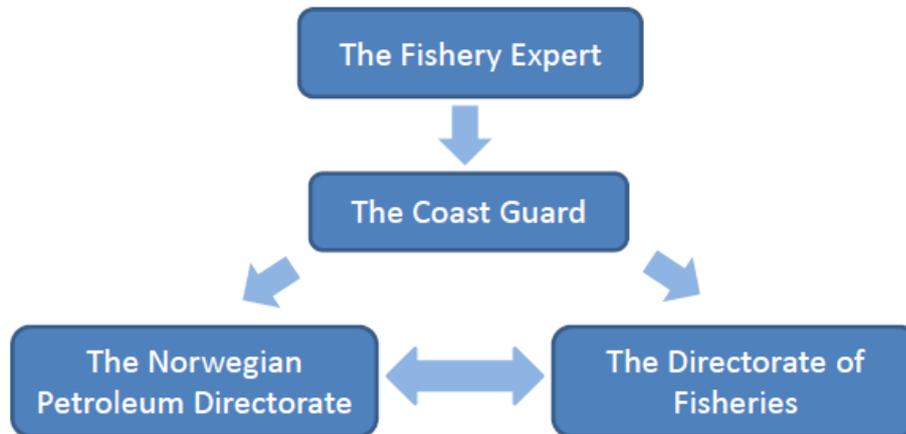
The fishery expert's general contact with the Coast Guard:

- Contacting the Coast Guard Report Centre before arrival in the area where the seismic shooting is to take place.
- Requesting information about fixed fishing gear and fishing activities in general.
- Informing the Report Centre of the position of lines scheduled to be surveyed over the next few days so that the report central can plot the lines.
- Maintaining good contact with the Coast Guard Report Centre during operations in areas with ongoing fishing activities

Notification plan for incidents and situations that may arise on the field:

The fishery expert must be able to contact the authorities via the Coast Guard at all times.

- The Coast Guard maintains preparedness 24 hours a day, seven days a week
- The Coast Guard is the primary contact and shall inform and communicate notifications to the Norwegian Petroleum Directorate and the Directorate of Fisheries



The following information must be provided if the fishery expert reports incidents or situations to the Coast Guard:

- Name of person/organisation who has submitted the notification
- Survey name
- Name and IMO number of vessel(s) involved
- Registration number of fishing vessel
- Date
- Positions
- Brief description of the situation, including any own observations and information about to what extent the incident has been resolved.

2. Brief description of regulations and routines for survey activities

A seismic survey for petroleum exploration is a petroleum activity. It constitutes a necessary part of the subsequent activities performed to discover and produce petroleum. One of the objectives of the regulations is to ensure that the activities take place with due consideration for other activities such as fishing and shipping. Among other measures, this is ensured by reporting the activity five weeks before it is due to start. Furthermore, obtaining feedback from the authorities forms an integral element of the reporting system, thus ensuring that it is possible to adapt the survey activities to other activities.

Summary of relevant regulations

The following laws and regulations apply to petroleum exploration:

- Act of 29 November 1996, No. 72 relating to petroleum activities (the Petroleum Act), Chapter 2 Exploration Licence and Chapter 3, Production Licence, etc.
- Regulations to the Act relating to petroleum activities of 27 June 1997, No. 653 (the Petroleum Regulations), Chapter 2.
- Regulations relating to resource management in the petroleum activities of 18 June 2001 (the Resource Management Regulations), Chapter 2.

Copies of the relevant regulations has been enclosed as appendices to the manual.

Amendments have been made to the Petroleum Act and the Regulations to the Act relating to petroleum activities. The amendments entered into force on 1 July 2009 and relate to exploration vessels engaged in petroleum activities having to keep equipment for electronic positioning reporting on board.

Petroleum exploration

Exploration for petroleum on the Norwegian Continental Shelf shall take place in accordance with an exploration licence or within a production licence, cf. Sections 2-1 and 3-3 of the Petroleum Act. An exploration licence is normally granted for one year at a time. A production licence is granted for up to ten years (initial period) and may subsequently be extended.

Exploration within the scope of the Petroleum Act may include geological, petrophysical, geophysical, geochemical and geotechnical activities, including shallow drilling, as well as operation and use of a facility to the extent it is used for the purpose of exploration. (Section 1-6, litera e of the Petroleum Act). Thus, seismic data acquisition is one of several types of activities covered by the term exploration.

An exploration licence grants a licensee the right to explore for petroleum in all areas open for petroleum activities. It does not give the licensee exclusive rights to explore the areas covered

by the licence, nor does it give the licensee any preferential rights in the award of production licences.

The Norwegian Petroleum Directorate has been delegated authority to award exploration licences. The licence contains standard terms and conditions for the exploration activities. Individual terms and conditions may also be stipulated in addition to the standard terms.

A production licence is awarded by the Ministry of Petroleum and Energy and generally gives the licensee an exclusive right to acquire seismic data within the area covered by the production licence.

Notification of seismic survey

Before a seismic survey is initiated, the licensees must submit a notification about their plans for seismic data acquisition to the Norwegian Petroleum Directorate, the Directorate of Fisheries, the Institute of Marine Research and the Ministry of Defence. The Norwegian Petroleum Directorate will receive feedback from the other institutions consisting of technical advice, in part based on the expected military activities, fishing activities or spawning periods in relation to the respective survey.

Based on the consultation submissions, the Norwegian Petroleum Directorate will make a recommendation to the licensee. Normally, the Norwegian Petroleum Directorate will recommend that the licensee follows the recommendations made by the other consultation bodies.

In its recommendation, the Norwegian Petroleum Directorate may lay down assumptions for how the Directorate expects the survey to be conducted. In most cases, this will relate to fishing activities that are already taking place or that will commence during the data acquisition. The objective is to avoid conflict situations. The licensee will also be informed of the general priority given to ongoing fishing activities.

After the procedure has been completed, the Norwegian Petroleum Directorate announces the planned activity, stating the area involved and the expected time intervals.

Other activities that may comprise seismic surveys

Acquisition of seismic data may also be conducted in accordance with other legal provisions:

- Scientific exploration licence (Act relating to scientific research, etc.)
- Track surveys and other subsurface surveys (drill site surveys), cf. Section 30 of the Regulations to the Act relating to petroleum activities and Section 7 of the Resource Management Regulations.
- Data acquisition carried out directly under the direction of the authorities.

The Norwegian Coast Guard serves as a point of contact for seismic testing activities that do not relate to a specific survey.

3. The role of the fishery expert, etc.

Section 5 of the Resource Management Regulations defines the role of the fishery expert as follows:

” Fishery experts shall act in an advisory capacity for the survey within their area of expertise and said experts must be assured of an unrestricted and independent position. The duty as fishery expert shall be carried out in an objective and impartial manner with respect to the contractor company and the fishery interests.”

This entails that the role of fishery expert cannot be combined with other positions on board, nor can the fishery expert be otherwise employed by the shipping company.

The fishery expert has a duty to keep himself informed of any ongoing or expected fishing activities in the area. This also applies to fixed fishing gear. Furthermore, the fishery expert shall ensure efficient communication between the parties on the field, as well as optimal compliance with the specific terms and conditions that apply to the performance of the assignment.

Through his role, the fishery expert shall help establish an understanding between the industries and promote good coexistence in the ocean regions. The fishery expert shall be objective in his dealings with all parties.

Kick-off meeting with the operator

The Norwegian Oil Industry Association (OLF) and IAGC have established guidelines for its members. The guidelines recommend that the fishery expert participates in the kick-off meeting for each survey.

Documents that should be available on board the seismic vessel

Exploration or production licence for the relevant area

Relevant acts and regulations such as the Petroleum Act, the Petroleum Regulations, the Resource Management Regulations, and the Marine Resources Act.

Letter (recommendation) from the Norwegian Petroleum Directorate concerning the current survey.

4. Format and submission of fishery expert log

The fishery expert is responsible for submitting a log to the Norwegian Petroleum Directorate and the Directorate of Fisheries after completion of a mission. The deadline for submission is two weeks after the mission has finished.

The fishery expert has a duty to submit the log according to a specified format.

Format

The log should be submitted in electronic format.

A standardised format for the log has been enclosed in this manual. It is also available on the Norwegian Petroleum Directorate's web site (www.npd.no). The various forms included in the log can also be downloaded from the web site.

Note that documents and printed matter intended for print-outs must be written in Times New Roman, size 12. No other fonts should be used.

The log shall consist of four main parts in the following order:

Standard front page:

The information on the front page shall be filled in to the extent that it is available. It is particularly important to fill in the name of the survey and the reference number (case number) from the Norwegian Petroleum Directorate and, if applicable, also from the Directorate of Fisheries.

Summary:

Give a brief summary of the course of events and any incidents that occurred during the survey, as well as other matters that may be of relevance. Participation in the kick-off meeting shall be described.

Log from the mission:

An accurate log shall be kept containing a balanced amount of detailed descriptions. A description of the fishing activities and contact with other vessels in the area is a central element in this respect. The description of the course of events shall indicate the time the events took place and be recorded in a manner that makes it possible to reconstruct any incidents that the vessel has been involved in.

In the event of an incident, a description of the following must be provided:

- Date and time
- Position
- Weather conditions (wind speed, wind direction and wave height)
- Brief description of the situation. This may include:
 - What was the vessel doing at the time? (deploying, retrieving or towing streamers)
 - Loss of equipment in connection with seismic streamer operations or electromagnetic surveys must be entered in the log.
 - Fishing activities in the area
 - Contact or lack of contact with vessels
 - Conflict situations
 - General observations that may be relevant to the licence

Statistics form – supplementary log form

The Norwegian authorities aim to obtain a better overview of activities on the field during acquisition of seismic data. Consequently, the fishery expert must prepare a report on a standardised form and enclose it with the log.

At the outset of the fishery expert's duty period, any previous information relevant for the mission must be provided, as well as information about the seismic data acquisition and the fishery expert. Information about production, activity and communication on the field must be indicated on the form on a daily basis. It is important that this takes place consecutively and to the best of one's judgement, and that this is not postponed until the end of the mission. Pay particular attention to "number of incidents involving fishing vessels". This refers to major incidents where a problem has arisen between the fishery expert and the fishing vessel that could not be resolved there and then, and that required the involvement of other authorities (the Coast Guard).

Appendices

Relevant contacts for the fishery expert

The Norwegian Coast Guard

Telephone number: 07611

From satellite telephones: + 47 76 10 80 60

Fax: + 47 76 11 22 33

E-mail: kystvaktcentralen@kvnord.no

Squadron South: + 47 926 92 926

Squadron North: + 47 990 94 209

The Norwegian Coast Guard is the primary contact in the event of situations requiring external assistance or advisory services.

Website: www.mil.no/sjo/kv

The Coast Guard telephone numbers are staffed 24 hours a day seven days a week.

The Norwegian Petroleum Directorate

Professor Olav Hanssens vei 10

P.O. Box 600

4003 STAVANGER

E-mail: postboks@npd.no

Telephone number: + 47 51 87 60 00

Website: www.npd.no

The Norwegian Petroleum Directorate is only open during office hours.

The Directorate of Fisheries

Strandgaten 229

P.O. Box 185, Sentrum, 5804 Bergen

National calls: 03495

International calls/satellite calls: + 47 800 30 179

Fax: + 47 55 23 80 90

E-mail: postmottak@fiskeridir.no

Website: www.fiskeridir.no

The Directorate of Fisheries is only open during office hours.

Standard front page

FISHERY EXPERT LOG

Seismic or electromagnetic surveys

Name of fishery expert:

Survey name:

Name of vessel, incl. call signal:

Name of accompanying vessel, incl. call signal:

Geographical area of the survey, incl. specification of block and coordinates, if available:

Report for the period:

Survey conducted for:

Reference number / case number quoted in NPD's recommendation:

.....

Date and signature of fishery expert

Mission log

Below is an example of how to keep a daily log:

Date / time	Position	Weather	Text
05.07 00:00 hours	N 67° 07' E 07 ° 46'	N-5 Sea: 3	Seismic activities ongoing. No fishing activities observed
05.07 08:20 hours	N 67 ° 07' E 07 ° 59'	N-4 Sea: 2	The gillnet fishing vessel "NN" was observed fishing approx. 9.5 nautical miles from us. Received updated information about fixed fishing gear in the area from the Coast Guard Report Centre
05.07 12:00 hours	N 67 ° 07' E 08 ° 23'	N-4 Sea: 2	Unidentified vessel, presumed trawler, plotted at a distance of 12 nautical miles, on a crossing course. VHF contact established. Vessel stating that it will stop fishing activities in the area in approx. one hour.
05.07 24:00 hours	N 67° 10' E 07 ° 30'	N-2 Sea: 1	Seismic activities terminated. Started retrieving streamers. No fishing activities in the area.

Statistics – Supplementary form for the fishery expert’s log keeping

NB - the form is based on daily log keeping insofar as possible, within the time frame 00.01 hours to 24:00 hours (to be handed in together with the log)

Survey name		Was the following documentation available on embarkation? (yes/no)						
Name of vessel		Letter from the NPD relating to the survey						
Name of company		If available, had the above letter been translated into English?						
Area		Acts and regulations (Petroleum Act, Petroleum Regulations, Resource Management Regulations and the Marine Resources Act)						
Type of seismic activity		Were the acts and regulations above available in English?						
Fishery expert(s)								
Subject	Week	Date	Date	Date	Date	Date	Date	Date
Seismic Production (yes =1, no=0)								
Number of fishing vessels in the area (within 20 nautical miles)								
Number of fishing vessels contacted								
Number of fishing vessels Unanswered calls								
Number of fishing vessels having changed their fishing activities due to the seismic vessel								

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Number of times the seismic vessel aborted line or the shooting due to fishing activities								
Number of incidents involving fishing vessels or processing plants								

Instructions for seismic data acquisition on the NPD website

The NPD's FactMaps and FactPages provide an overview of ongoing seismic acquisition activities. For efficient use, it is a great advantage to understand how the menus work.

FactMaps

Start the interactive map focused on the:

Norwegian Continental Shelf [here](#)

North Sea [here](#)

Norwegian Sea [here](#)

Barents Sea [here](#)

If you experience problems with the links above the first time, exit your Internet browser and try again, or use the refresh button – **F5**.

Lines indicate 2D seismic in the area

Outlines (polygons) indicate another acquisition than 2D (3D, OBS/4C, electromagnetic or geotechnical/drilling site survey)



Use “zoom in” to see a smaller area



Use “zoom out” to see a larger area



Use “pan” to move the map using the same scale



Use “magnifying glass” to see the map for the whole Norwegian Continental Shelf.

In the picture that now appears on the screen - note that:

Under *Seismic acquisition* only *Net areas* will be displayed (area excluding turn area of the seismic vessel, i.e. specifying the actual area or the lines where the seismic data is acquired)

You will also see:

Turn area. Select *Gross areas*, and if relevant remove tick in *Net areas* and click on *Refresh map*.



Click on the information hyperlink for more information about each survey (vessels, fishery expert, coordinates etc). First check that the green button has been selected in front of Seismic acquisition. Depending on the situation, one of the following questions will appear (be aware that some of these questions may be hidden behind the current window)

- Do you also want to display the insecure elements? (answer Yes)
- Do you only want to display the secure elements (answer No)
- In some cases, several surveys will appear. This is because your choice is relevant to many different surveys.

The FactPages will now be displayed. Se below for description.

Tip:

Several surveys. When showing *Gross areas*, many surveys will be displayed on top of each other. It may be difficult to make out which label belongs to which survey. If this is the case, try to zoom in, zoom out or pan.

 **Legend.** Click on this icon in the menu to get an overview of the symbols representing the different phases (label). Click on it again to return to the original list.

Blocks and quadrants. Although **Blocks** and *Quadrants* are turned on these will not always show if the scale is too large. These will appear if you zoom in. This has been done to make the maps easier to read.

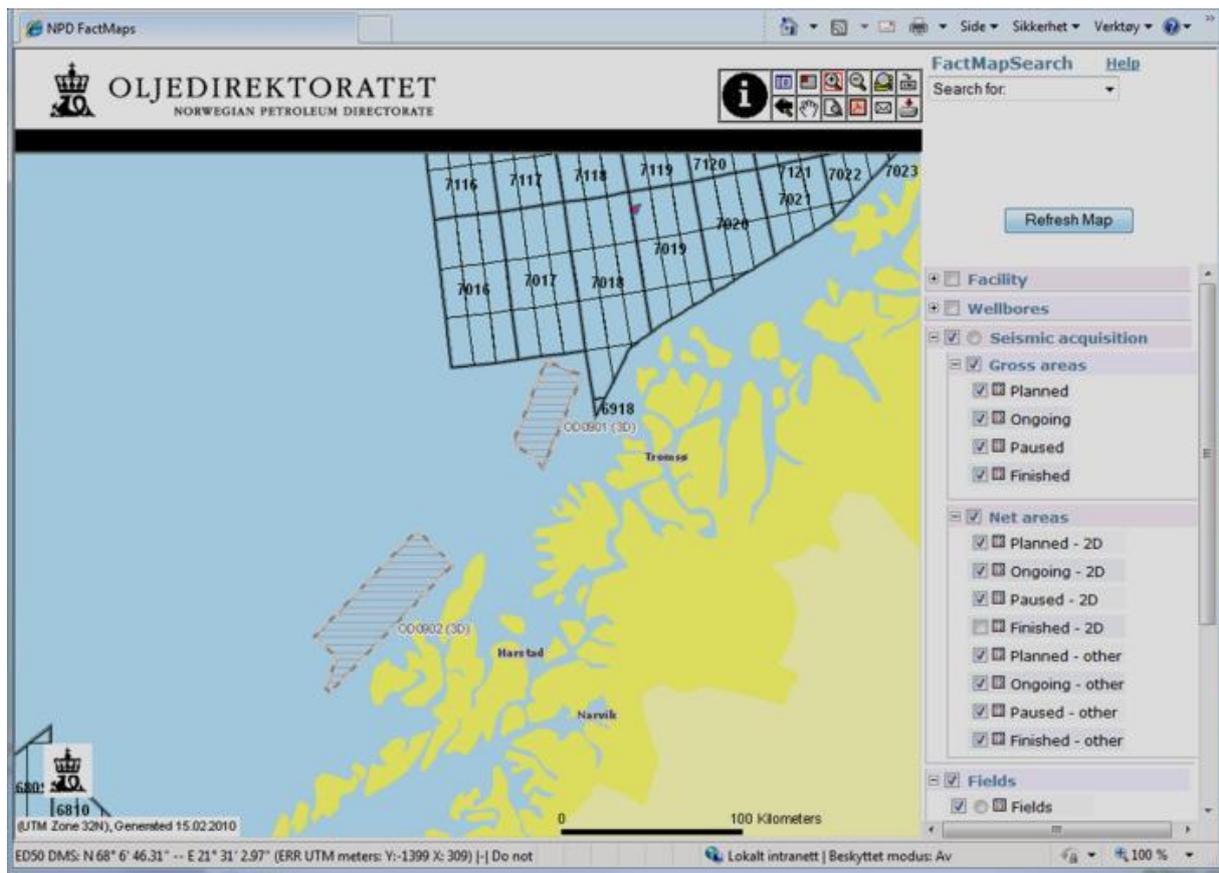
 Click on this icon in the menu to prepare a good print-out of the map in PDF format. You will see a red frame that can be extended by dragging the red arrow with the mouse. Be careful to move the mouse in the direction of the arrow to expand the area. You can also move the area by placing your mouse indicator inside the frame.

Search function. You can search for a special survey by using the *NPD Map Search* - in the top right-hand corner. Select *Seismic acquisition* and then the survey you want. The selected survey will now appear.

Position. The geographic coordinates (degrees, minutes, seconds) will normally be displayed in the lower status bar in your web browser (for instance Internet Explorer). If these are not displayed it may be because the status bar is not displayed. To display the status bar in Internet Explorer go to:

Tools, Toolbars, Status bar.

Example of map posted on 15 February 2010



FactPages

Seismic surveys are on version 2 of the FactPages.

Start FactPages v2 by clicking [here](#).

Click on *Seismic / Page view / Ongoing* .

You will now see a list of all ongoing surveys. Click on the top survey.

In the picture that now appears on the screen - note:

Window. The window that appears is divided into three parts. The menu is displayed in the two parts to the left. Information about the survey appears to the right.

Details. To hide the details and just see the headlines, click on *Hide details*. *Show details* displays all information.

Map. To see the map of the survey, click *Map*. FactMaps will now appear, displaying information about the chosen survey.

The selected survey will have a turquoise frame. If the window is too small, maximise it and click on *Refresh Map*.

Printing tip:

To print all information about a survey, click on **Export to PDF** and then print the information.

Example of FactPage for seismic activities posted on 15 February 2010.

The screenshot shows the 'Oljedirektoratet - Faktasider' web interface. At the top, there is a navigation bar with tabs for 'Selskap', 'Brønnbane', 'Seismikk', 'Felt', 'Innretning', and 'TUF'. The 'Seismikk' tab is selected. Below the tabs, there is a list of survey identifiers with checkboxes. The survey 'BG0904' is highlighted. To the right of the list, there is a detailed view for 'BG0904' under the heading 'Generell informasjon'. This view contains a table with the following data:

Survey navn	BG0904
OD nummer for survey	7074
Status	Ferdig
Område	Norskehavet
Markeds tilgjengelig	Ja
Hensikt	Ordinær undersøkelse
Hoved type	Dypseismikk
Del type	3D
Selskap - ansvarlig	BG Norge AS
Kilde type	Seismisk kilde
Antall kilder	1
Kilde størrelse	5085 cu.in
Kilde trykk	2000 PSI
Sensor type	Kabler
Antall sensorer	8
Sensor lengde [m]	5200m
Start dato - planlagt	01.07.2009
Start dato - faktisk	01.07.2009

Contact in the NPD:

Hans Stokka (+47 51 87 62 95), Wenche Svela (+47 51 87 63 51) or Nina Bøgh Thomas (+47 51 87 60 35).

Terms and expressions frequently used on board seismic vessels

ENGLISH

A

ABORTED LINE

AIRGUN ARRAY

AIRGUN CLUSTER, SEE ALSO CLUSTER

AIRGUN STRING

ALONGSIDE

AUV: AUTONOMOUS UNDERWATER
VEHICLE

AVERAGED TIME (AOL)

B

BEAM PATTERN

BIRD

BOOMER

BOSUN

C

CABLE TANGELING

CALIBRATION

CEROSENE

CHASE VESSEL e.l. CHASE BÅT
CHIEF NAVIGATOR (CHIEFNAV)

CHIEF OFFICER

CLIENT

CLUSTER

CREW

D

DAILY LOG

NORWEGIAN

avbrutt innsamling av en påbegynt linje, f.eks.
ved fiskeriaktivitet, tekniske problemer, osv
luftkanonfelt

luftkanonklynge, to til flere luftkanoner satt
sammen

luftkanonrekke/-streng

når seismikkfartøyet får følgebåten eller
forsyningsbåt fortøyd langs skutesiden for
bunkring/proviantering o.l.

AUF: autonom undervannsfarkost

beregnet skytetid på linjen

strålemønster, diagram som viser hvordan
lydenergien blir „konsentrert“ under
utsending

høyderegulerende rør som festes på hydrofon-
kablene („streamerne“) ca. hver 50-100 m
platevibrator. Impulslydkilde: Lydpulsen
lages ved at en spesiell plate vibrerer pga.
genererte virvelstrømmer i den. Brukes i
lettseismikk

arbeidsleder på dekk for det maritime
dekksmannskapet

vase på hydrofonkablene, ”spagettikrøll”
kalibrering

parafinaktig væske som er i hydrofonkablene
for å ha riktig oppdrift i sjøen. Tappes ut og
fylles i etter behov ved utlegg

følgefartøy, følgebåt

ansvarlig for den seismiske navigasjonen om
bord

overstyrmann – nautisk mannskap

oljeselskapets representant og kontrollør om
bord. Sjekker at innsamlede data er i henhold
til selskapets kriterier

klynge

mannskap. Deles opp i seismisk mannskap og
maritimt mannskap på et seismikkfartøy

daglig skriftlig rapport over siste døgns
seismiske aktiviteter og kan gjøres
tilgjengelig for fiskerikyndig person

DEPLOYING CABLES DILT FLOAT	utlegging av hydrofonkablene ("streamerne") avlang bøye/flottør som markerer fremste enden på hver hydrofonkabel
DOWN TIME	dødtid/nedetid når det ikke samles inn data
DRILLING ACTIVITY	boreaktivitet
E	
END OF LINE (EOL) –	avslutning av skyting på en linje
F	
FARFIELD	fjernfelt
FAST RESCUE CRAFT (FRC)	hurtiggående MOB-båt som benyttes til mannskapsbytte og mindre jobber på hydrofon-kablene ("streamerne")
FEADER OFFSET	avdrift på hydrofonkablene ("streamerne") i forhold til planlagt linje som skytes
FISHING ACTIVITY	fiskeriaktivitet
FIRE DRILL	brannøvelse
FISHREP (FLO = fishery liaison officer)	fiskerikyndig person
G	
GEOPHONE	geofon, sensor for å registrere rystelser i undergrunnen
GHOST PULSE or just GHOST	skyggepuls
GUN CHIEF	arbeidslederen på dagtid på kanondekket
GUN DECK	dekkspanet hvor luftkanonene blir satt ut og tatt inn
GUN MECANIC	dekksmekaniker på kanondekket
GUN ARRAY	luftkildene oppsatt
GUNSTRING 1, 2, 3	kanorekke 1, 2, 3. Det er som regel 3 kanon- rekker ("gun strings") i hvert luftkanonfelt ("gun array")
H	
HELICOPTER LANDING OFFICER (HLO)	som oftest overstyrermann som leder prosedyrene ved helikopteroperasjoner
HYDROPHONE	hydrofon, sensor for å registrere lyd i væsker – her i sjøen
I	
INFILL	gjenopptaking av skyting av en linje som har mangelfull innsamling
INSTRUMENT ROOM	seismikkmannskapets kontrollrom hvor de innsamlede dataene hele tiden blir overvåket
J	
K	
L	
M	
MARINE MAMMAL OBSERVER (MMO)	sjøpattedyrobservatør (hval- og selobservatør)
MEDIC	lege om bord på seismikkfartøy

MONO WING	en type paravan med spesielle egenskaper, utviklet av GECCO. Brukes til det samme som paravanene
MULTIBEAM	flerstråle, multistråle
MULTI-FREQUENCY	flerfrekvens, multifrekvens
MUSTER DRILL	evakueringsøvelse for alle om bord
MUSTER STATION	møteplass for de enkelte av mannskapene om bord ved alarm (øvelse, virkelighet)
N	
NAVIGATION	benevnelse som brukes mellom bro og navigasjonsrommet hvor seismikknavigatørene opererer
NEAR FIELD	nærfelt.
NOISE SPECTRUM	støyspektrum
O	
OBSERVER	person under opplæring til lederstilling ombord innenfor seismisk navigasjon og operasjon
OPPSTARTMØTE ("kick off meeting")	møte der retningslinjene for seismikktoktet gjennomgås. Fiskerikyndig person bør delta på disse og gjerne presentere den informasjonen han har samlet inn på forhånd om ev. forventet fiskeriaktivitet i prospektområdet, og også om spesielle bunn-/strømforhold som det bør tas hensyn til
P	
PARAVAN	oterbord eller -dør som holder seismikkutstyret bak fartøyet utstrakt til sidene
PARTY CHIEF (PC)/OCEAN MANAGER (OM)	lederen for hele seismikkmannskapet Har ansvaret for den seismiske driften om bord
PENETRATION ECHO SOUNDER	penetrasjonsekkolodd
PICK UP CABLES	ombordhaling av hydrofonkablene ("streamerne")
PORT TURN	babord sving
PROSPECT AREA	området det er gitt tillatelse til seismisk datainnsamling
Q	
R	
RECEIVER	mottaker
RE-SHOOT	gjentatt skyting av avbrutt linje
ROV: REMOTELY OPERATED VEHICLE	FUF: fjernstyrt undervannsfarkost
RUN-IN	den innkjøringskursen seismikkfartøyet går på før SOL ("start of line")
S	
SAFETY ZONE	sikkerhetssone som seismikkfartøyet krever for sikker navigering, og som formidles til alle fartøy i nærheten
SCANNING SONAR	skanningsonar

SHIFT LEADER	arbeidsleder som overtar ansvaret når ikke ”gun chief” eller ”party chief” er på vakt
SLIPWAY	slippen i hekken på seismikkfartøyet, hvor luftkanonfeltene (”gun-arrayene”) settes ut og tas inn
SOFT START SHOOTING	gradvis økning av lufttrykket i luftkanonene ved skyting før start av ordinær skyting. Skal skremme unna sjøpattedyr som kan være i nærheten av luftkanonfeltene
SOUND CHANNEL	lydkanal. Spesielt dybdeintervall i sjøen for lydforplantning med lav demping
SOURCE	kilde; benevnelse på luftkanonene eller andre akustiske signalkilder
SOURCE VESSEL	kildefartøy.
SPARKER	gnistutlader. Impulslydkilde: Lydpulsen lages ved utladning av en høy spenning mellom to elektroder. Brukes i lettseismikk
STARBOARD TURN	styrbord sving
START OF LINE (SOL)	benevnelse på tid og posisjon for starten av skytingen på en linje
STREAMER	hydrofonkabel/lyttekabel som slepes etter fartøyet og samler opp de lydbølgene som reflekteres fra bunnen
STREAMER DECK	dekket som vanligvis er over kanondekket, og hvor hydrofonkablene (”streamerne”) blir lagt ut fra og tatt inn
STREAMER VESSEL	hydrofonkabelfartøy eller bare kabelfartøy
SUPERWIDER	spektratauet som paravanene/dørene er festet i
T	
TAIL BOUY	markeringsbøye som er festet i enden på hydrofonkabelen (”streameren”) og markerer enden på slepet
TEARDROP TURN	en type sving som seismikkfartøyet bruker for å komme inn på neste planlagte linje som skal skytes
TOOLBOX MEETING	møte i forkant av hurtig-MOB-arbeid (FRC) og ”workboat”-arbeid og helikopteroperasjoner
TRACER	linjer som bygger opp det seismiske bildet som samles inn
TRANSDUCER	svinger, omvandler
TRANSMISSION	utsending, transmisjon, overføring
TS-TEST	sjøtemperatur (T)- og saltholdighetstest (S) av havområdet det skytes seismikk i. Utføres som oftest av følgefartøyet på vegne av seismikk-mannskapet
TUNED AIRGUN ARRAY	avstemt luftkanonfelt

Translation from Norwegian

TURN RADIUS	den radiusen som seismikkfartøyet bruker for å kunne snu uten at det blir sammenvikling av utstyret bak båten
TUV: TOWED UNDERWATER VEHICLE	TUF: tauet undervannsfarkost
V VIBRATOR	Vibrator – geofysisk utstyr for å sende signal til undergrunnen
W WORKBOAT	solid småbåt som brukes til arbeid på kablene ("streamerne")

Based on the list of 9 November 2009 by Tommy Larsen (original) and John Dalen (supplement). Edited by the Norwegian Petroleum Directorate in February 2010.

Comments and extracts from relevant acts and regulations

Comments to the petroleum regulations

ACT – 1996-11-29-72

Act relating to petroleum activities (the Petroleum Act)

The Petroleum Act was adopted on 29 November 1996, cf. Odelsting Proposition No.43 (1995-96) and entered into force on 1 July 1997.

The Petroleum Act regulates most aspects of the Norwegian petroleum activities. The Act is based on a licensing system. The petroleum activities are divided into different phases such as exploration, production and exploitation. Petroleum activities may only take place in areas open to such activities. Special resolutions apply to development and decommissioning (disposal). Legislation relating to Svalbard has not been included in this manual. The petroleum resources shall be managed for the benefit of Norwegian society as a whole.

The Regulations relating to safe practice in exploration and exploration drilling for petroleum deposits on Svalbard, stipulated by Royal Decree of 25 March 1988, apply to the territories of Svalbard and the offshore areas extending to the territorial boundaries.

Extract from the petroleum regulations

ACT RELATING TO PETROLEUM ACTIVITIES (THE PETROLEUM ACT)

Section 1-3 Requirements relating to licence etc.

None other than the State may conduct petroleum activities without the licences, approvals and consents required pursuant to this Act. Provisions otherwise in the Act and regulations issued pursuant to the Act shall apply to such activities insofar as they are appropriate.

Regulations – 1997-06-27-653

REGULATIONS TO ACT RELATING TO PETROLEUM ACTIVITIES (THE PETROLEUM REGULATIONS)

Section 3 Applications for exploration licences

Application for exploration licences according to the Act section 2-1 shall be submitted to the Norwegian Petroleum Directorate and shall contain information regarding:

- a) name, address and nationality of the applicant. If the application comprises more than one applicant, all the names, addresses and nationalities shall be stated,
- b) who in Norway will be the representative in relation to the authorities,
- c) the area which is comprised by the application,

- d) the purpose and the nature of the exploration.

The Norwegian Petroleum Directorate may require additional information.

Attestation for payment of fee, cf. section 5, shall be enclosed with the application.

Application for an exploration licence with enclosures shall be written in Norwegian or English.

Section 4 Exploration activities authorised by the licence

The exploration licence authorises geological, petrophysical, geophysical, geochemical and geotechnical activities. Shallow drilling may be carried out to a depth stipulated by the Norwegian Petroleum Directorate. The Norwegian Petroleum Directorate may limit the individual exploration licence to apply to particular types of exploration.

The Norwegian Petroleum Directorate may make it a condition for an exploration licence that information shall be given about sale or exchange of exploration results, and may stipulate conditions for the implementation of the exploration activities.

Section 6 Submission of information in connection with exploration

The licensee shall no later than five weeks prior to the commencement of activities according to an exploration licence, submit the following information to the Norwegian Petroleum Directorate, the Directorate of Fisheries and the Ministry of Defence:

- a) time, duration and accurate information about the area of the exploration activities, stating position lines,
- b) exploration methods to be used,
- c) what vessel is to be used,
- d) the form in which the results of the exploration will be available.

The name of the fishery expert shall be submitted to the said authorities as soon as possible, and no later than five days prior to commencement of the activities.

The Norwegian Petroleum Directorate can grant exemptions from the time limit stated in the first and second paragraphs.

If the activities have not commenced within the time stated, the licensee shall, as soon as possible, submit a new notification about the start-up date of the activities to the authorities as described in the first paragraph.

While the activities according to an exploration licence are in progress, the licensee shall on a weekly basis submit information to the Norwegian Petroleum Directorate, the Directorate of Fisheries and the Ministry of Defence, with regard to the time, the place and the nature of the activities, the movements of the exploration vessel and its arrival in Norwegian internal waters.

If the activities are not completed within the time stated, the licensee shall submit a new notification about the duration of the activities to the authorities as described in the first paragraph.

The Norwegian Petroleum Directorate shall ensure that a web site is established containing updated information about seismic surveys. The Norwegian Petroleum Directorate shall, for as long as it deems necessary, send to be inserted in "Etterretninger for Sjøfarende" ("Notifications to Seafarers") information regarding the exact time and place for the activities, the name and speed of the exploration vessel, and the length of seismic cables, if any.

As soon as possible and no later than three months after the individual activity according to an exploration licence has been completed, the licensee shall submit data, records and results from the activities to the Norwegian Petroleum Directorate. Unless the Norwegian Petroleum Directorate requests raw data to be submitted, data requiring processing in excess of 3 months shall be submitted as soon as they are processed. The licensee shall furthermore state whether the results, etc. from the exploration activities are to be commercially available.

Vessels engaged in exploration for petroleum shall have on board and use satellite tracking equipment and a trip recorder. The Norwegian Petroleum Directorate shall stipulate further provisions relating to tracking equipment, including access to data.

This section applies correspondingly to exploration activities carried out according to a production licence.

0 Amended by the Regulations of 26 June 2009, No. 857 (in force 1 July 2009)

Section 30 Surveys of pipeline routes and other soil surveys

The licensee shall, no later than five weeks prior to the commencement of surveys of pipeline routes and other soil surveys, submit the following information to the Norwegian Petroleum Directorate, the Directorate of Fisheries and the Ministry of Defence:

- a) The purpose of the surveys,
- b) Time, duration and place of the surveys,
- c) Survey methods,
- d) What vessel is to be used,
- e) The depth to which drilling will be carried out, if applicable.

Vessels carrying out seismic surveys or other soil surveys shall have a fishery expert on board when required on account of the fishing activities in the area. In cases of doubt, the Norwegian Petroleum Directorate has the final authority, in consultation with the Directorate of Fisheries. The name of the fishery expert shall be submitted to the said authorities as soon as possible, and no later than five days prior to commencement of the activities.

While the activities are in progress, the licensee shall on a weekly basis submit information to the Norwegian Petroleum Directorate, the Directorate of Fisheries and the

Ministry of Defence, with regard to the time, the place and the nature of the activities, the movements of the exploration vessel and its arrival in Norwegian internal waters.

If the activities have not commenced within the time stated, the licensee shall, as soon as possible, submit a new notification about the start-up date of the activities to the authorities as described in the first paragraph.

The Norwegian Petroleum Directorate can exempt from the time limits stated in the first and second paragraphs.

During surveys of pipeline routes and other soil surveys, drilling to depths more than 200 metres below the seabed must not take place.

0 Amended by the Regulations of 26 June 2009, No. 857 (in force 1 July 2009)

REGULATIONS 2001-06-18, No. 749:

REGULATIONS RELATING TO RESOURCE MANAGEMENT IN THE PETROLEUM ACTIVITIES (RESOURCE MANAGEMENT REGULATIONS)

Section 4. Particular information in connection with exploration activities

The following information shall be submitted to the Norwegian Petroleum Directorate, the Directorate of Fisheries, the Institute of Marine Research and the Ministry of Defence:

1. No later than five weeks prior to commencement of the exploration activity:
 - a) designation of the exploration activity,
 - b) which exploration or production licence the activity shall be conducted under,
 - c) name of the holder of the exploration licence,
 - d) type of exploration activity to be conducted (seismic 2D or 3D, electromagnetic, shallow drilling, etc.),
 - e) name of the party carrying out the exploration activity,
 - f) planned start-up and conclusion dates,
 - g) planned extent of the exploration activity, both boat kilometres and CDP-km,
 - h) the exploration area (block, – necessary number of geographical coordinates – minimum four). The entire exploration area must be indicated, including area for necessary calibration and testing of equipment in connection with the exploration activity, as well as the area needed to turn the vessel),
 - i) number of air guns and total chamber volume, possible other signal sources,

- j) number of streamers and length of the tow,
- k) name of the vessel,
- l) the vessels' call signals, IMO numbers and nationality,
- m) calls, if any, into internal Norwegian waters,
- n) name of the fishery expert if already known,
- o) format of collected data,
- p) whether the data shall be commercially available or not,
- q) evaluation of whether the exploration activities could harm particularly vulnerable environmental resources.

2. On a weekly basis during implementation of the exploration activities:

- a) designation of the exploration activity,
- b) which exploration or production licence the activity shall be conducted under,
- c) name of the holder of the exploration licence,
- d) date the exploration activity will start. Conclusion date to be included on the last weekly report,
- e) status of the activity, e.g. number of kilometres shot in total and during the last week, both boat-km and CDP-km,
- f) name of vessel, call signal and name of fishery expert,
- g) calls, if any, into internal Norwegian waters.

3. Changes in exploration activities, cf. Section 6 of the Petroleum Regulations:

- a) if the activity is not commenced at the stipulated date, the licensee shall as soon as possible send a new report indicating the start-up date for the activity to the authorities as indicated in Item 1,
- b) if the licensee wishes to continue the activity beyond the stipulated conclusion date, the licensee must submit information about the activity to the authorities as indicated in the first subsection no later than within ten working days prior to the stipulated conclusion date.

The Norwegian Petroleum Directorate may grant exemptions from the deadlines listed above.

The provisions in Section 4 also apply to track and other subsurface surveys that encompass acquisition of seismic data.

0 Amended by the Regulations of 22 December 2006, No. 1638 (in force 1 January 2007), 29 December 2008, No. 1625 (in force 1 January 2009).

Comments to Section 4 Particular information in connection with exploration activities

This section elaborates on Section 6 of the Petroleum Regulations with regard to the information to be submitted in connection with exploration activities. This information has until now been required as conditions stipulated in the individual exploration license, and has furthermore been included as part of a form prepared by the Norwegian Petroleum Directorate to be completed in connection with submission of information prior to and during exploration activities. This provision therefore does not constitute any change in relation to information to be submitted. The requirement to submit the names of the vessels applies to all vessels involved in the survey.

According to the obligation to notify, the activity starts when the source is activated.

Section 5. Vessels that carry out seismic surveys on the Norwegian continental shelf

Vessels carrying out seismic surveys shall maintain a safe distance from vessels carrying out fishing activities and from fixed and floating fishing gear. Particular attention must be exercised when an accumulation of fishing vessels is observed.

Vessels carrying out seismic surveys shall have a fishery expert on board when required on account of the fishing activities in the area. In cases of doubt the Norwegian Petroleum Directorate has the final authority.

The nomination of the fishery expert for the individual survey shall be reported to the regional office of the Directorate of Fisheries in:

- Region South with regard to seismic surveys in the area south of 62°N,
- Region Møre og Romsdal with regard to seismic surveys in the area between 62°N and 67°N,
- Region Troms with regard to seismic surveys in the area north of 67°N.

If seismic surveys are to take place within more than one of the above-mentioned areas, the fishery expert shall be reported to the regional office of the area in which the main part of the activities will take place.

A report on the name of the fishery expert for the survey, together with the name of the vessel, timeframe and work area, shall be submitted to the applicable regional office no later than five working days prior to the planned commencement of the seismic survey.

Fishery experts shall act in an advisory capacity for the survey within their area of expertise and said experts must be assured of an unrestricted and independent position. The duty as fishery expert shall be carried out in an objective and impartial manner with respect to the contractor company and the fishery interests.

The licensee and/or whoever is responsible for the operation of the vessels shall make the relevant provisions and data available to the fishery expert.

Accompanying vessels shall have a passive role vis-à-vis third parties.

The Norwegian Petroleum Directorate may grant exemptions from the deadlines listed above.

0 Amended by the Regulations of 22 December 2006, No. 1638 (in force 1 January 2007), 29 December 2008, No. 1625 (in force 1 January 2009), 29 June 2010 No. 1028 (in force 1 July 2010).

Comments to Section 5 Vessels carrying out seismic surveys on the Norwegian continental shelf

This section represents a continuation of provisions previously contained in regulations relating to fishery expert on board seismic vessels, Sections 1, 10, 12, 14 and 15.

An object of the regulations is to prevent possible conflicts of interest, cf. Section 6 of the Petroleum Regulations. If there is no fishing activity in the area in question in the relevant time period, the seismic vessel may initiate the activity. As long as the vessel is operating with the cables out, it is regarded to be a vessel “restricted in her ability to manoeuvre”, cf. Regulations for preventing collisions at sea of December 1 1975 no 5, rule 3, litera g. If a fishery vessel then arrives, it will have duty to yield according to regulations for preventing collisions at sea, rule 18, litera c until the seismic vessel has retracted the cables. According to the *lex specialis* principle the regulations for preventing collisions at sea will take precedence over the seismic vessel’s duty to keep a safe distance to vessels engaged in fishing stipulated in Section 5 of the Resource Regulations when the seismic vessel has its cables out.

The general rule according to Section 5, second paragraph of the present regulations is that every seismic vessel shall carry a fishery expert on board.

According to the last paragraph of this section, relevant provisions and data shall be made available to the fishery expert. This means both the relevant legal framework, including a copy of the licensee’s exploration license, and any decisions made in connection with the individual exploration activity, e.g. conditions imposed in connection with the activity.

Section 5a *Particular information in connection with exploration activities*

Duty to report the vessel’s position

Vessels engaged in exploration for petroleum shall have on board and use equipment which monitors and reports the vessel’s position and movements. It is illegal to switch off, damage, break or in any other way manipulate the position reporting equipment during the duration of the exploration activities.

Requirements relating to position reporting equipment

Pursuant to this provision, requirements relating to position reporting equipment shall meet the requirements stipulated in the Regulations relating to required satellite-tracking equipment

for use on board fishing vessels, stipulated by the Directorate of Fisheries on 23 December 1999 (J – notification 241 – 1999). Requirements relating to service providers who pass on tracking information shall apply correspondingly, cf. Section 3 of the above regulations.

Requirements relating to notification of activation of signals

Vessels about to initiate exploration activities for petroleum shall submit notifications electronically to the Directorate of Fisheries, appointed by the Norwegian Petroleum Directorate as system operator, for activation of receipt of signals. *The requirement relating to monitoring and registration shall apply from when the sound sources are activated and for the entire duration of the survey.*

Position reporting

Vessels engaged in exploration activities for petroleum shall automatically report the position of the vessel to the Directorate of Fisheries twice every hour for the duration of the activity. The Directorate of Fisheries may, upon further instructions from the Norwegian Petroleum Directorate, request confirmation of the individual vessel's position more than twice every hour.

The notification of position shall contain the following information:

- a) unique identification of the vessel,
- b) the geographical position of the vessel at the time of reporting with a position fault of less than 500 metres and a confidence interval of 99%,
- c) the time and date of the vessel position,
- d) the speed and course at the time of reporting,
- e) identification of the type of report submitted.

(The regulations will enter into force on 1 April 2010.)

Section 6. Fishery expert on board vessels carrying out seismic surveys

The fishery expert shall have completed and passed the examination for an approved course. The Norwegian Petroleum Directorate stipulates the technical content, point in time and location for such course and issues the course diploma. A fee can be stipulated for course participation.

To participate on the course, the candidate must be fluent in Norwegian and English and able to document that he has been active as a fisherman or a fishery expert for a total of at least twelve months during the last five years. The candidate must also prove knowledge of the fishery activity in the areas where the seismic vessel will operate. These areas are specified as south of 62 degrees north, between 62 and 67 degrees north and north of 67 degrees north. The candidate must, as a minimum, have a certificate of navigation equal to master of vessel class C or equivalent.

Also after the approved course is passed, the fishery expert must be able to document that he has been active as a fisherman or a fishery expert for a total of at least twelve months during the last five years.

The Norwegian Petroleum Directorate keeps record of the persons who have passed the course and issues a certification of the right to act as a fishery expert. The certificate has a duration of five years and must subsequently be renewed. The Norwegian Petroleum Directorate can stipulate that he who does not fulfil the activity duty as an active fisherman and/or a fishery expert or in other ways does not fulfil his duties as a fishery expert, may lose his right to practise as a fishery expert.

The fishery expert has a duty to familiarise himself with the contents of the licence and other relevant provisions. The manual for fishery experts will be stipulated by the Norwegian Petroleum Directorate and shall be brought along on every commission.

0 Amended by the Regulations of 22 December 2006, No. 1638 (in force 1 January 2007), 29 December 2008, No. 1625 (in force 1 January 2009), 29 June 2010 No. 1028 (in force 1 July 2010).

Comments to Section 6 Fishery expert on board vessels carrying out seismic surveys

This section basically represents a continuation of the provisions previously contained in Section 11 of regulations relating to fishery expert on board seismic vessels. The new element is a clarification of the fact that the fishery expert has a duty to familiarize himself with what is comprised by the rights of the license. There is also a requirement for the fishery expert to maintain knowledge and expertise to remain in the Directorate of Fisheries register of fishery experts.

The provision that the fishery expert must have completed and passed an approved course will not enter into force until 1 June 2009, to give the fishery expert sufficient time to complete the course.

Section 7. Track surveys and other subsurface surveys

No later than five weeks prior to the commencement of track surveys and other subsurface surveys, the licensee shall submit the following information to the Norwegian Petroleum Directorate, with copies to the Directorate of Fisheries, the Institute of Marine Research and the Ministry of Defence:

- a) the purpose of the surveys,
- b) time, duration and location of the surveys,
- c) survey methods,
- d) which vessel(s) will be used,
- e) drilling depth, if applicable

The provisions in Section 4 also apply to track and other subsurface surveys that encompass seismic data acquisition.

Mapping activity with hull mounted or ROV-mounted equipment, typical camera, video camera, multi beam echo recorder, penetrating echo recorder, sonar/side scan sonar and acoustic/electromagnetic pipe tracker is not comprised of the reporting duty.

Vessels that carry out track and other subsurface surveys shall have a fishery expert on board when necessary out of consideration for fishery activities in the area. If there is any doubt, the Norwegian Petroleum Directorate has the authority to make such decisions. A report including the name of the fishery expert for the survey, the name of the vessel, time period and work area shall be submitted to the appropriate regional office in the Directorate of Fisheries no later than five working days prior to commencement of the activity.

The Norwegian Petroleum Directorate may grant exemptions from the deadlines in the first and fourth subsections.

In connection with track surveys and other subsurface surveys, drilling depth is limited to 200 metres below the seabed.

Prior to track surveys a map shall be submitted to the Norwegian Petroleum Directorate, showing the planned track and possible prospective areas. The scale and UTM coordinates shall be stated.

0 Amended by the Regulations of 29 December 2008, No. 1625 (in force 1 January 2009), 29 June 2010 No. 1028 (in force 1 July 2010).

Section 7 Track surveys and other sub-surface surveys

This section supplements the requirements relating to information contained in Section 30 of the Petroleum Regulations.

Section 21. Fishery expert log

The fishery expert shall keep a log (diary) according to a specified format covering the time he/she is present on board the seismic vessel. The log shall, after the mission is finished, be kept on file by the licensee for two years. Within two weeks after the mission is finished, copies of the log shall be sent to the Norwegian Petroleum Directorate, the Directorate of Fisheries and to the regional office of the Directorate of Fisheries for the area in question.

0 Amended by the Regulations of 30 November 2007, No. 1648 (in force 1 January 2008), 29 December 2008, No. 1625 (in force 1 January 2009).

Comments to the fishery regulations

ACT – 2008-06-06-37

ACT RELATING TO THE MANAGEMENT OF WILD LIVING MARINE RESOURCES (MARINE RESOURCES ACT)

The Marine Resources Act was adopted on 1 January 2009 and replaces the Act relating to sea-water fisheries, etc.

The Marine Resources Act applies on board Norwegian vessels, within Norwegian land territory with the exception of Jan Mayen and Svalbard, in the Norwegian territorial sea and internal waters, on the Norwegian continental shelf, and in the areas established under sections 1 and 5 of the Act of 17 December 1976 No. 91 relating to the Economic Zone of Norway. “The purpose of this Act is to ensure sustainable and economically profitable management of wild living marine resources and genetic material derived from them, and to promote employment and settlement in coastal communities.” The Act introduces the principle for management of wild living marine resources as a fundamental principle of the management of wild living marine resources. Thus, the Act provides the legal basis for stipulating terms and conditions for harvesting and utilisation of resources comprised by the Act.

The Act applies to all harvesting and other utilisation of wild living marine resources and genetic material derived from them. Wild living marine resources are fish, marine mammals that spend part or all of their life cycle in the sea, plants and other marine organisms that live in the sea or on or under the seabed and that are not privately owned. Thus, the Act regulates not only business activities related to the traditional resources. It also comprises other utilisation of wild living marine resources such as bioprospecting.

Extract from the fishery legislation

ACT – 2008-06-06-37

ACT RELATING TO THE MANAGEMENT OF WILD LIVING MARINE RESOURCES (MARINE RESOURCES ACT)

Section 3 Substantive scope

This Act applies to all harvesting and other utilisation of wild living marine resources and genetic material derived from them. Wild living marine resources are fish, marine mammals that spend part or all of their life cycle in the sea, plants and other marine organisms that live in the sea or on or under the seabed and that are not privately owned. Nevertheless, the Act does not apply to harvesting and other forms of utilisation of anadromous salmonids as defined in section 5 (a) of the Act of 15 May 1992 No. 47 relating to salmonids and freshwater fish, etc.

To ensure that harvesting and other forms of utilisation take place in accordance with provisions laid down in or under this Act, the Act also applies to other activities in connection with harvesting and other utilisation of catches, such as transshipment, delivery, landing, receipt, storage, production and placing on the market.

The provisions of Chapter 5, cf. Chapters 11 and 12, also apply to activities other than those mentioned above if they have an impact on harvesting and other forms of utilisation of wild living marine resources and genetic material derived from them.

Section 24 Rules on due care

Any person arriving at harvesting grounds where gear has been set shall acquaint himself with the location of such gear. All persons shall conduct themselves in such a way that fishing gear is not damaged or unnecessarily endangered.

It is prohibited to impede harvesting or spoil harvesting opportunities by means of shooting, noise or other improper conduct.

The Ministry may adopt further provisions on the manoeuvring of vessels and conduct on harvesting grounds.

Section 25 The first cast rule

The person who first begins to set gear and continues to do so without undue delay has the right to the stretch of water required by the gear or that will be encircled by it.

If two or more vessels begin to set their gear at the same time, they have equal rights.

A vessel that has no gear set shall when requested move if it is hindering others that have begun harvesting operations or are in the process of setting their gear.

Comments to the coast guard regulations

ACT-1997-06-13-42

Act of 13 June 1997 No. 42 relating to the coast guard (the Coast Guard Act)

The Coast Guard Act was adopted in 1999.

The Norwegian Coast Guard is the primary authority in Norwegian jurisdictional waters within fishery control, and cooperates closely with the fisheries authorities to ensure the best resource control possible. The Norwegian Coast Guard also has statutory duties relating to sovereignty, custom, environment, search and rescue, port control, as well as a number of other responsibilities laid down in the Coast Guard Act. Furthermore, the Coast Guard has prosecution authority when involved in investigations and makes use of coercive measures. The individual authoritative responsibility is exercised within a distribution of responsibility vis-à-vis the respective superior authority and the individual authority's specific rules and regulations must be complied with.

Extract from the regulations

ACT 1997-06-13, No. 42

ACT OF 13 JUNE 1997 NO. 42 RELATING TO THE COAST GUARD (THE COAST GUARD ACT)

Section 1 Purpose of the Act

The purpose of this Act is to enable the Norwegian Coast Guard to assist as well and efficiently as possible in maintaining government surveillance of the coast and the sea areas off the coast and to carry out the other tasks arising from this Act.

Section 3 Geographical scope of the Act

The Act applies

- a. in the internal waters and the territorial sea, including the internal waters and territorial sea of Svalbard, and the contiguous zone established pursuant to the provisions of the Act relating to Norway's territorial waters and contiguous zone,
- b. in the area of jurisdiction established by the Act of 17 December 1976 relating to the Economic Zone of Norway,
- c. on the continental shelf, and
- d. beyond Norway's area of jurisdiction subject to such limitations as follow from international law

When exercising such control as mentioned in Section 9-12, 15 and 18, the

Geographical scope of the relevant legislation applies instead of the first paragraph, subparagraphs a to c. Control may nevertheless not be exercised on land unless it is clearly necessary.

The King may issue further provisions concerning the geographical scope of the Act.

Section 8 Upholding of sovereignty, etc.

The Coast Guard shall uphold Norwegian sovereignty and Norway's sovereign rights.

Section 9 Inspection of fishing and hunting activities, control of resources, etc.

The Coast Guard may ensure compliance with provisions set out in or issued pursuant to the following statutes:

- a. Act of 22 March, No. 4 relating to hunting of polar bears.
- b. Act relating to food production and food safety, etc. (the Food Act)
- c. Act relating to Norway's fishery limit and prohibition against fishing etc. by foreign nationals inside the fishery limit
- d. Act relating to the economic zone of Norway
- e. **Act relating to the management of wild living marine resources (Marine Resources Act)**
- f. Act of 26 March 1999, No. 15 relating to the right to participate in fisheries and hunting (Participants Act)

The same applies to provisions issued in accordance with the Act of 17 July 1925, No. 11 relating to Svalbard which regulates fishing and hunting in the internal waters and territorial sea of Svalbard.

Section 12 Other surveillance tasks

The Coast Guard may ensure compliance with the provisions set out in or issued pursuant to the following statutes:

- a. Act of 14 June 1884, No. 3 relating to protection of subsea telegraph cables outside territorial waters,
- b. Act relating to ship safety and security (the Ship Safety and Security Act),
- c. **Act relating to scientific research and exploration for and exploitation of subsea natural resources other than petroleum resources,**
- d. ---
- e. Act relating to harbours and fairways (the Harbour Act),

- f. Act relating to petroleum activities (the Petroleum Activities Act).**
- g. Act concerning the entry of foreign national into the Kingdom and their presence in the realm (The Immigration Act)
- h. Act of 16 June 1989, No. 59 relating to the Pilotage Service, etc.,
- i. Act of 26 June 1998, No. 47 relating to Leisure Boats and Small Craft, Chapter 3, and
- j. The Norwegian Maritime Code of 24 June 1994, No. 39, Chapter 6 A. The police competence in accordance with Section 145 and the rules laid down pursuant to this Act, shall apply correspondingly the Coast Guard.

The same applies to provisions issued in accordance with the Act of 17 July 1925, No. 11 relating to Svalbard that governs matters other than those mentioned in Section 9, second subsection and Section 11, second subsection.

Section 15 Control in connection with scientific studies, etc.

The Coast Guard may exercise control over persons, vessels or fixed installations carrying out scientific studies or other research activities.

Section 19 Relationship to other control authorities

The provisions of this Act do not restrict the authority that is by statute or other provision vested in other control authorities, the police or the prosecuting authority.

Unless otherwise decided by the King, the control exercised by the Cost Guard pursuant to Sections 10-12 shall as far as possible be exercised at the request of the appropriate control authority pursuant to Sections 10-12.

Control in the internal waters and territorial sea of Svalbard shall in all cases be exercised in accordance with instructions issued by the Governor of Svalbard.

Section 20 Disclosure of information

Coast Guard officials may, notwithstanding any duty of secrecy, give the appropriate control authority, the police or the prosecuting authority any information naturally pertaining to the tasks of the Coast Guard pursuant to this Act.

The duty of secrecy to which officials or other control authorities, the police and prosecuting authority are subject shall not prevent them from disclosing such information as specified in the first subsection to the Coast Guard.

The King may issue further provisions relating to the exchange of information pursuant to the first and second subsection.

Section 21 Police authority and criminal investigation

Coast Guard officers have limited police authority as regards ensuring compliance with provisions set out in or issued pursuant to this Act or the statutes referred to in Section 9 – 12.

Coast Guard officers may carry out a criminal investigation in the event of a suspected contravention of provisions set out in or issued pursuant to this Act or the statutes referred to in Section 9 -12, of other criminal acts committed within the area of the Coast Guard's jurisdiction, cf. Section 3, and otherwise at the request of the competent prosecuting authority.

The King may issue further provisions concerning the police authority of the Coast Guard.

Section 22 Implementation of control and enforcement measures in the internal waters and territorial sea of Svalbard

The implementation of control and enforcement measures in the internal waters and territorial sea of Svalbard may only take place in accordance with instructions issued by the Governor of Svalbard.

Section 23 Maintenance of peace and order in fishing and hunting grounds

The Coast Guard may take the necessary steps to maintain peace and order in fishing and hunting grounds, including the securing and safeguarding of the area against unauthorised persons.

The King may issue further provisions concerning the measures that the Coast Guard may take pursuant to the first subsection.

Section 25 Apprehension of vessels

If there is just cause to suspect that any such offence as is mentioned in Section 36 has been committed, or that the provisions mentioned in Section 9 have contravened, the prosecuting authority or the Coast Guard may order the suspected vessel to proceed to a Norwegian port.

If necessary, a prize crew may be placed on board. The prize crew will take over command of the vessel insofar as this is necessary to sail it to a Norwegian port.

Section 26 Arrest, search and seizure of property

In the event of such suspicion as is mentioned in Section 25, first subsection, the police or the Coast Guard may search persons, vessels or fixed installations.

Arrests, searches and seizure may also be carried out according to the provisions of Act No. 25 of 22 May 1981 relating to legal procedure in criminal cases.

Section 29 Right of inspection, etc.

When exercising control pursuant to Section 9, the Coast Guard may stop vessels and inspect vessels and fixed installations. When carrying out its control activities, the Coast Guard shall be allowed unimpeded access to vessels and fixed installations.

The Coast Guard may order the person in charge of a vessel to stop fishing or hunting and haul in the trawl or other gear. As part of its control activities, the Coast Guard may itself take action to stop fishing or hunting, such as hauling in or cutting fishing gear and similar measures.

Inspectors may be placed on board to carry out inspection duties. Necessary board and accommodation shall be provided at the expense of the owner of the vessel or the fixed installation. The inspector shall be allowed to use the radio and other communication equipment free of charge.

The person in charge of a vessel or fixed installations shall provide necessary assistance and information, including:

- a. Producing relevant objects and documents, for example logs,
- b. Making and authenticating copies of documents, computer print-outs, etc.,
- c. permitting inspection of the voyage recorder on board,
- d. permitting notes concerning any contravention to be entered in the ship's log, catch logbook, receipts ledger, etc.

The person in charge shall sign the inspector's report, but may add to it any comments he/she deems necessary.

Section 32 Measures in connection with control of scientific studies, etc.

The Coast Guard may require the suspension or cessation of scientific studies or other research activities if the conditions prescribed for the conduct of such activities have not been met.

Translation from Norwegian