

REPORT

Guidelines for data sharing with Mareano: Recommendations from EMF work group

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1 SUMMARY

Starting from the Award in Pre-defined Area (APA) license round in 2019, the Ministry of Petroleum and Energy introduced a new license obligation to share sea bottom data with Mareano. Mareano is a mapping program started in 2006 by the Norwegian Government with the aim to map topography, sediment composition, contaminants, biotopes and habitats in Norwegian waters. This report contains recommendations for which data to share with Mareano. In general, it is recommended to share environmental data, bathymetry and sonar data except for high resolution data close to infrastructure and within 12 nautical miles. Water

column data from multibeam echosounder should not be shared at this stage. Seismic data should be shared according to existing regulations in the Yellow Book issued by the Norwegian Petroleum Directorate (NPD). It is not recommended to share geotechnical data.

2 INTRODUCTION

2.1 Background

Starting from the APA license round in 2019, the Ministry of Petroleum and Energy introduced a new license obligation to share sea bottom data with Mareano. The obligation does not include data that is commercially sensitive or bound by confidentiality through existing contracts and agreements. Reference is made to the model APA production licence Article 5, fourth paragraph: "*Rettighetshaverne pålegges å foreta nødvendig kartlegging av eventuelle forekomster av korallrev og andre verdifulle bunnsamfunn, herunder viktige tobishabitater som kan bli berørt ved petroleumsvirksomhet i området for tillatelsen, og å sikre at slike eventuelle forekomster ikke nedslammes eller skades av petroleumsvirksomheten. Det kan stilles særskilte krav for å unngå skade på slike forekomster. Det vises til Mareano [www.mareano.no] for informasjon om påviste korallrev på norsk kontinentalsokkel. Data fra kartlegging av havbunnen skal gjøres tilgjengelig for Mareano i den grad tilgjengeliggjøring ikke er hindret av konfidensialitetsforpliktelser og det ikke er av konkurransemessig betydning å hemmeligholde dataene.*"

Mareano is a mapping program started in 2006 by the Norwegian Government with the aim to map topography, sediment composition, contaminants, biotopes and habitats in Norwegian waters. The program is executed by the following three institutions: Statens Kartverk (The Norwegian Mapping Authority), Norges geologiske undersøkelser (The Geological Survey of Norway) and Havforskningsinstituttet (Institute of Marine Research). The program receives a yearly funding from the government and has contributed data and knowledge to the Government's Management Plans for the Barents Sea and Norwegian Sea. Going forward Mareano will focus more attention on the North Sea.

To shape and facilitate a consistent implementation of the license obligation, Exploration Manager's Forum (EMF) of Offshore Norge decided in a meeting on 29th January 2022 to establish a cross industry workgroup to recommend a data sharing policy including which data to share.

2.2 Work Group
The workgroup had the following members:
Jan Helgesen - Equinor (leader)
Anita Hansen - Chrysaor
Jan Henrik Kommedal - AkerBP
Johan Leutscher - Vår Energi
Morten Halvorsen – Lundin Energy
Egil Syre - Shell
Morten Diesen - Wellesley
Turid Øygard – Offshore Norge

The work group had six meetings in the period February-August 2022.

3 GENERAL DATA SHARING RECOMMENDATIONS

3.1 Licenses awarded from 2019 and onwards

It is recommended that Licenses awarded from APA 2019 and onwards implement this guideline to fulfil the license obligation.

3.2 Licenses awarded prior to 2019

It is recommended that Licenses awarded prior to 2019 implement the guideline "to a reasonable extent" as a voluntary contribution to a sustainable management of the sea and to support good co-existence with other marine industries like the fisheries. However, some data types may not be easily available and will require significant effort and cost to retrieve, process and quality check. This is especially relevant for old surveys where data may not even be present in a digital form. In such cases, when significant work by a contractor is required, one could either seek financial contribution from Mareano or omit the data from the sharing.

3.4 Data within 12 nautical miles boundary

Bathymetry data within the 12 nautical miles boundary cannot be shared with Mareano due to the regulations in the Act about information of specific areas, special objects and seabed maps (Act 2017-06-21-88).

3.5 Sensitive security related information

It is acknowledged that certain information within the scope of the information that could be relevant for Mareano, may be sensitive security related information. For security reasons, it is recommended <u>not</u> to share such information that may reveal sensitive details about

infrastructure, or about operations that can have a security dimension. This includes at least high resolution bathymetry data (lateral resolution less than 4 meters), sonar data and video data close to infrastructure and within safety zones around installations, and survey data that show the actual placement and characteristics of installed infrastructure.

3.6 Data from development projects

Data and locations of data acquisitions needs to be protected at early stages of development projects, due to procurement processes and because there is a need to keep business secrets before a development decision is taken. Data from development projects will therefore be shared after the Plan for Operation and Development (PDO) has been submitted to the authorities.

4 SHARING GUIDELINES BY DATA TYPE

4.1 Environmental data

Environmental data include biological and chemical characterization of sea bottom samples, photos and video recordings, and habitat and biotope maps (for example polygons indicating corals or sponges) from interpretations.

Most data are already shared with the authorities through reports, through the MOD database owned by Offshore Norge and operated by DNV, and through the web portal operated by the Norwegian Environmental Agency (Miljødirektoratet). There is a general obligation to share environmental data through the Environmental Information Act (Act 2003-05-09-31).

The recommended guidelines for sharing are summarized in the table below. The sharing mechanism has been discussed with Mareano and other relevant stakeholders. It is recommended to upload data to the existing sharing solutions (MOD and MDIR web portal, DISKOS) and for Mareano to access data through these solutions. This will minimize the amount of additional work required to fulfil the license obligation. The column with heading "Limitations" is used to indicate data that are excluded from sharing.

Video recordings represent enormous quantities of data that would be impractical to share systematically. Many of the recordings are not interesting from an environmental point of view. It is suggested that sharing of video recordings is possible on specific request.

Data type	Share?	Sharing solution	Limitations
Chemical analyses results	Yes	MOD data base	No
Biological analyses results	Yes	MOD data base	No
Geo-referenced photos	Yes	MDIR web solution or DISKOS	No
Geo-referenced videos	On request	Direct transfer, TBD or DISKOS	Video close to sensitive infrastructure
Habitat and biotope maps	Yes	Direct transfer. In the future through MDIR web solution if possible	No

4.2 Seismic data

Seismic data is acquired by licenses as site surveys to map potential drilling hazards, as part of an exploration effort or to optimize production and recovery from fields. Most data relevant for exploration are owned by multiclient companies and any request for sharing of multiclient data from Mareano will have to be directed to the multiclient company.

The confidentiality of seismic data is regulated in detail by the Petroleum Regulations and is described in the Yellow Book issued by the Norwegian Petroleum Directorate (NPD). It is mandatory for licenses to upload and report data in the DISKOS data base. In general, it is recommended to share data with Mareano through the DISKOS data base and according to the regulations. Data acquired by any License will become public two years after completion, and Mareano will then be able to access the data in DISKOS.

Sharing of interpretations would require significant extra work related to quality control, retrieval, choosing between different versions and would raise liability issues. It is therefore recommended not to share interpretations.

In some cases, ultra-high resolution acoustic reflection data (sub-bottom profiler data) are acquired as part of a site survey. Such data are judged to be commercially sensitive and should not be shared.

Data type	Share?	Sharing solution	Limitations
Seismic from site surveys	Yes	DISKOS	Follow Yellow Book requirements
Proprietary seismic acquired by a license	Yes	DISKOS	Follow Yellow Book requirements
Multiclient seismic	No		
Seabottom picks from seismic	No		
Sub-bottom profiler data	No		

4.3 Multibeam echosounder, bathymetry and side-scan sonar data These data types are in general not commercially sensitive and can be shared within the limitations given in section 2 and with the exception given in the paragraph below.

Multibeam echosounder data from a hull-mounted system can be processed for reflections from the water column, giving information about gas in the water column. The data has historically not been processed or interpreted since there has not been any specific use for it. There are some efforts to process and interpret old data, but the data are not ready for sharing at this stage.

Data type	Share?	Sharing solution	Limitations
Multibeam echosounder and bathymetry data	Yes	TBD	Water column data and high-resolution data close to infrastructure not shared
Side-scan sonar data	Yes	TBD	High-resolution data close to infrastructure not shared

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4.4 Geotechnical data

Geotechnical data and reports will not be shared due to commercial sensitivity and because geotechnical reports contain commercial and confidential Information. CPT measurements are considered commercially sensitive and will not be shared.