


Introduction

DGH of behalf of MoPNG, Govt. of India has established a National Data Repository (NDR) at DGH, OIIB Bhawan, Sector-73, Noida. NDR is a government sponsored data repository to preserve and disseminate oil and gas information and to promote & regulate hydrocarbon Exploration & Development activities in India

Primary Objective of NDR:

- To preserve and disseminate oil and gas information
- Data storage and retrieval infrastructure for all E&P activities
- Promotion and regulation of exploration and development activities
- Data reporting, data exchange and data trading with existing E&P players & all Geo-scientific fraternity
- To facilitate HELP/OALP policy regime
- To promote research and development in energy sector

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- A draft policy of National Data Repository(NDR) Policy for Data Sharing, Accessibility and Dissemination has been formulated and the same is appended below.
 - The objective of this policy is to assimilate, preserve and regulate the E&P data generated by various companies over the last several decades and held within the NDR in order to enable systematic disclosure, sharing and dissemination.

Comments/feedback are invited from stakeholders on National Data Repository(NDR) Policy for Data Sharing, Accessibility and Dissemination on or before 07.02.2017.

Views/comments may be forwarded to the following address:

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Data Sharing, Accessibility and Dissemination Policy

NDR

Outline of Policy

- Definition and Abbreviations
- Current scope of data held within NDR
- Data Users and Entitlement
- Data Submission at NDR
- Data Disclosure, Availability and Timeline
- Data Access Policy of NDR
- Data Dissemination
- Data Pricing

Compulsory Acquisition and Easy Access and Dissemination

- Augmentation of NDR is a continuous process
- Data is acquired on a perpetual basis from the Operators
- Data access through web portal on 10'x10' grid
- Preview of processed Seismic image file of 2D/3D data, Log data and availability of Reports and raw Seismic data .
- End users may come onboard NDR to view the data in data rooms
- The Geological prospectively can be accessed through scanning of data
- Data delivery of any kind is through offline mode on data order

Definition & Abbreviations:

<p>Data</p>	<p>For the purpose of this policy, data means all information obtained as a result of Petroleum operations under any contract, license, lease, agreement, permit, any other arrangement and/or acquired by DGH/Govt. including but not limited to Geological, Geophysical data with navigation, Geochemical, Petro physical, well logs, maps, magnetic tapes, cores, cuttings, Reservoir and production data as well as all interpretative and derivative data including reports, analysis, interpretations and evaluation prepared in respect of petroleum operations</p>
<p>Proprietary data</p>	<p>For the purpose of this policy, proprietary data means and includes interpretation data (Horizon, Faults, Attributes, Maps etc.), Interpretation reports, AVO/Inversion, Well completion Report, Formation evaluation report, Special studies reports (NMR, DMR, FMI, Special Core analysis) and any other data as may be classified by DGH as proprietary data.</p>
<p>Ownership of data</p>	<p>All data is and shall be the property of the Central Government</p>

Current Scope of Data held within NDR

Data set	Data Description
Seismic	
Field Data	Raw Data (2D & 3D), Navigation & SPS files
Prestack Data	Geometry Merged Gather, Pre stack Time Migration Gather, DMO Gather, PSDM Gather, Decon Gather
Post stack Data	Stack Data (DMO stack, Raw/Final PSTM stack, PSDM Stack, PSDM stacked to Time, PP & PS stack, Post Stack Migration, Angle stack), Inversion & AVO data.
Reports	Acquisition, Processing, Interpretation Reports, Observer Logs, Gravity & Magnetic Reports,
Others	Basin information/Docket, Horizon & Faults, Velocity, Reservoir Modeling data, Cultural & well header data
Gravity Magnetic	
Gravity & Magnetic	Ground Gravity & Magnetic Data , Gravity Magnetic reports,
Aero Gravity Magnetic	Air born Gravity & Magnetic survey Reports
Magnetic telluric /CSEM	Magnetic telluric reports, CSEM(Survey data including Section/Map/Reports)

Current Scope of Data held within NDR

Well Data	
Drilling	Drilling Reports,
Geology	Geological Reports, Lithology Reports, Stratigraphy, Biostratigraphy, FDP & DOC, Petrographic reports, Mud logs, Litho logs, Paleontological, Sedimentological and Paleontology reports
Rock & Core	Conventional Core Analysis, Special Core Analysis (SCAL), Core Photos, Side Wall core,
Petro physics	Petro physical reports, Formation Evaluation reports, Well Log interpretation reports, MDT/RDT/RFT reports
Test, Fluid and Pressure	Formation Pressure, Well Tests, Fluid Analysis Reports, PVT Analysis, Well testing reports (conventional or DST)
Well Log	Wire-line Logs, LWD / MWD logs and special & advance Log (NMR/DMR/FMI/DSI/RT Scanner, Cased hole logs (CBL/USIT/CAST/CHN/CHFR/CHDT/RMT/RST), Production logs, Log Images (PDF/PDS/TIFF), Log Prints
Well Path	Well deviation & placement reports
Well Seismic	VSP, Check shot survey
Well	Well Proposal, Geo technical order, Well Completion Reports, Geochemical reports, Well end reports ,Production History ,Work over History ,Reservoir Study Reports, etc

Current Scope of Data held within NDR

Production Data	Production data of oil and gas reported by the oil companies operating on the Indian onshore & offshore area.
Reservoir Data	PVT Analysis Report & Data Related to Static & Dynamic Reservoir Modeling, Reservoir study report
Geochemical Data	Geochemical survey Report
CBM Data	Corehole summary and location, Master Log, Deviation survey data, Drilling Casing and Mud details, Proximate analysis, Elemental analysis, Petrographic analysis of coal, Gas desorption studies, Ultimate analysis, Core description, Composite well log, Geo-physical logs, Rock Quality Description Studies, Petro-Physical studies
Any other Data	Any other data related to E&P business as and when defined by DGH

Data Users & Entitlements

- E&P companies
- Students from Govt. recognized Indian/foreign Universities
- Govt. recognized Research Institutes
- Any other user authorized or entitled by NDR / DGH

Users can view the data available in NDR after registering on NDR web portal.

Data submission and Media:

- Augmentation of NDR is a continuous process whereas the data is acquired on a perpetual basis. The contractor/operator/licensee/lessee/permit holder shall as soon as available but not later than three months after acquisition/processing/interpretation or any value addition at each stage, as the case may be, provide to the Government or its designated agency DGH, free of cost, all data obtained as a result of petroleum operations under the license, lease, permit, contract or any other agreement.
- The data must be submitted in latest media such as 3592 cartridges or LTO-4, LTO-5, and LTO-6 or hard disk or any other higher media as may be decided by NDR/DGH.

Interpretation Data submission

The interpretation project shall be delivered in two separate packages:

- **The first package** shall contain a backup of the interpretation project in workstation format (e.g. Openworks, Petrel, SMT etc.) the name of the interpretation software and version number and any other relevant information that will enable NDR to restore the project shall also be included
- **The second package** shall contain ASCII exported files of Horizons, Faults, Volume grids, Map grids, export of logs in LAS format and seismic lines/cube in SEG Y format, project coordinate reference system and any other relevant information that will enable NDR to import the product of interpretation to any interpretation software shall also be included
- The submission shall be accompanied by interpretation report that lists all interpretation assumptions, conventions, standard horizons names and events used for picking

Data Packaging and Sending Instruction

The data parcel must be accompanied by:

- Data Transmittal (Data listing) summary
 - Detailed Description of contents
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- Data shall be organized within the media to clearly identify the seismic data products (e.g. Seismic, Navigation and supporting documentation for field and processed data).
 - The label on the media must describe the data it contains
 - All media shall be securely packed using protective packing materials. NDR will not accept any hardcopy submission of reports etc.

Data quality control summary

Indexing and completeness

- Operators shall ensure that data parcel is complete and correctly indexed
- If transmittal does not match the data items, the data parcel will be returned to the data owner
- For Seismic related data all components must be cross checked with each other (i.e. each seismic file must have the respective navigation data and Acquisition and processing report)

Data completeness, consistence and integrity

- Once the data is copied in NDR and if any inconsistency is detected between header and data parcel information the parcel shall be returned to the operator
- The information present in the header will be checked for data consistency and integrity

Data submission and Media:

- In the international standard format
- Header should be in compliance with latest SEG standards
- Data must be QC checked before submission to NDR
- Data will be received and shared by NDR in the format mentioned below:

S. No	Data Type	Format
1	Field/Raw Data	SEGD, SEG Y
2	Navigation Data	UKOOA format for offshore data, SPS format for onland data
3	Seismic processed data (Stack/Gather)	SEG Y
4	Velocity	SEG Y or ASCII
5	Horizon/Faults	ASCII
6	Gravity & Magnetic Data	ASCII
7	Well Seismic Data (VSP)	VSP data in SEG Y, Check shots in ASCII, SEG Y
8	Well Log data	LAS, DLIS, LIS, PDS, ASCII, PDF
9	Reservoir Data	ASCII
10	Production Data	ASCII
11	Reports	PDF/ MS Word
12	Any other format as may be decided by the NDR/DGH	

Submission of value added data

- Field data/Raw data can be bought from NDR by user or investor for value addition including processing
- Investor purchasing raw data should agree & give an undertaking that after processing & value addition of data, a copy of all final outputs will be submitted in NDR, free of charge within three month of completion of the project
- NDR will not share these value added data as selling right will remain with the investors for initial period of five years but NDR can use these data for visualization to anyone
- NDR can sell these data after five years.

Data Disclosure, Availability and Timeline:

Type of Blocks	Type of Data	Timeline		
		For Visualization	For sale	
<p>Relinquished: Pre NELP, NELP Blocks, PEL /ML of Nomination blocks, CBM Blocks</p>	All E&P Data	As soon as available	From the date of relinquishment	
<p>Active: Pre NELP, NELP Blocks, PEL /ML of Nomination blocks, CBM Blocks and Blocks to be awarded / Shale Gas project/Gas Hydrate Project</p>	Geophysical Survey	Seismic field data along with Navigation	As soon as available	Three year from the end of year of acquisition
		Pre-Stack		
Post Stack				
Reprocessed data				
Geochemical Survey				
Gravity Magnetic Survey				
Acquisition & Processing reports (Seismic, GM, CSEM, Geochemical Survey)		As soon as available	Three year from the end of completion of interpretation project	
Interpretation reports (Seismic, GM, CSEM, Geochemical Survey)	Three year from the end of completion of interpretation project			Three year from the end of completion of interpretation project

Data Disclosure, Availability and Timeline:

Type of Blocks	Type of Data	Timeline		
		For Visualization	For sale	
<p>Active: Pre NELP, NELP Blocks, PEL /ML of Nomination blocks, CBM Blocks and Blocks to be awarded /Shale Gas project/Gas Hydrate Project</p>	Well Data	Well header	As soon as available	Free of cost
		Well Completion Report	As soon as available	As soon as available
		Geochemical Report		
		Well Log & deviation data	As soon as available	18 months from date of completion of study
		FER, Petrophysical reports, Well log interpretation report		
		Special study report (NMR, DMR, FMI, Special core analysis)		
		Well Seismic (VSP)		
		Conventional Core Analysis, Special Core Analysis (SCAL), Core Photos, Side Wall core etc		
Formation Pressure, Well Tests, Fluid Analysis Reports, PVT Analysis, Well testing reports (MDT, RDT, RFT , DST)				

Data Disclosure, Availability and Timeline:

Type of Blocks	Type of Data		Timeline	
			For Visualization	For sale
<p>Active: Pre NELP, NELP Blocks, PEL /ML of Nomination blocks, CBM Blocks and Blocks to be awarded/ Shale Gas project/Gas Hydrate Project</p>	Geological Data	Geological Reports	As soon as available	18 months from date of completion of study
		Lithology Reports		
		Stratigraphy Reports		
		Biostratigraphy Reports		
		Petrographic Reports		
		Mud logs		
		Litho logs		
		Paleontological Reports		
		Sedimentological Reports		
	Paleontology reports			
Reservoir Data	PVT Analysis Report , Data Related to Static & Dynamic Reservoir Modelling, Reservoir study report	As soon as available	Not for sale	
Production Data	Production data of oil and gas reported by the oil companies operating on the Indian onshore & offshore area			

Data Disclosure, Availability and Timeline:

Type of Blocks	Type of Data	Timeline	
		For Visualization	For sale
Regional /Speculative Survey/ Multi Client Survey	Acquired through Speculative Survey/ multi-client Surveys	As soon as available in NDR	Sale will be governed by the individual contracts.
Regional /Specific data	Acquired through DGH/Govt sponsored projects/ National Seismic programme and all Such other projects	As soon as available in NDR	Available for sale.
Sensitive data	Data as identified by MOD/Security Agencies	As per Guidelines of MOD/Security Agencies.	

Disclosure of Proprietary Data

- The NDR/DGH shall have the right to disclose any or all data including proprietary data, to any person or legal entity as per timelines
- However, if in the opinion of the DGH, disclosure of such data shall help and promote exploration and production activities in India, DGH shall disclose such data anytime with the consent of licensee, lessee or the permit holder as the case may be
- In case of conflict on the question as to whether any particular data is of proprietary nature, the DGH shall be sole authority to decide the matter

Data Access Policy of NDR

- Data access shall be available to the registered users through web portal on 10'x10' grid.
- Any user/investor after online registration at NDR portal can visualize the seismic data remotely in the form of image files, preview of well logs, listing of log files & availability of other reports on interactive GSI map on 24x7x365 basis.
- E & P users / investors will be allowed to see data in physical data rooms located at NDR, DGH **on first come first basis**. The investor should request NDR for loading & visualization of data through email. **Any investor on each occasion can view Data up to 30 sectors** ((One sector is equal to an area bound by one grid of 10'x10'))for offshore & 20 sectors for onshore area.
- For visualizing data for more than 30/20 sectors or for other area/sector investor should book another appointment on the web portal of NDR.
- Maximum 4 persons per company per workstation will be allowed to visit data rooms. The users / investors will be allowed to save interpretation project up to their booking date.
- The investors will be allowed to take maximum 05 snapshots per project.

Charges for data room booking:

Days	Data room charges per day per work station
First three days	USD 250.00
Fourth Day	USD 500.00
Fifth day onwards	USD 1250.00

The Indian companies will make the payment in equivalent INR

Sharing of data with recognized Universities & Academia

- Recognized Indian/Foreign Universities/ Educational Institutions will be provided data
- Uploading of signed and duly stamped scanned copy of Confidentiality agreement by the HoD is required
- A Limited data up to 50 sq. km. (multiple of 1'x1' grid) area at a discounted cost (50% of existing rates) for promoting research
- Data will be given at the free of cost to the meritorious students after proper certification by concerned Head of Department
- If the data requested is of more than 50 Sq. Km (multiple of 1'x1' grid) then the standard data charges will be applicable for whole of the volume
- The institute must share the study reports with DGH free of cost within three months of completion of project.

Sharing of data with Institution(s)

- To promote R&D, Government research institutes will be allowed to visualize free of cost all available data in physical data rooms for three days
- Visualization beyond three days will be charged as per the standard data room charge applicable to E&P operators
- All the E & P Data of one sector (area of one 10'x10' grid) may be shared with the institutes free of cost
- E & P Data for more than one sector may be shared with the Institutions on discounted cost i.e., 50% of existing rates
- Signing of a confidentiality agreement is required
- The institute must share the study reports to DGH free of cost within three months of completion of project

Data Dissemination

- **Payment:** Payment shall be accepted through a secured Gateway through Credit/Debit Card, Net Banking/Bank transfer, Bank Draft and Cheque on realization
- **Online delivery:** Small data especially well data (Log data, Well header), Seismic 2D processed stack data & Reports will be delivered instantly online after receiving payment.
- **Offline delivery:** Seismic Raw data and Pre & Post stack 2D/3D seismic (including Angle stack, raw/processed gathers) will be supplied invariably offline in the media selected by user/investor.
- **Data Pricing:** Price of NDR data & reports will be determined and notified by DGH from time to time.

DATA ORDERING FLOW CHART

