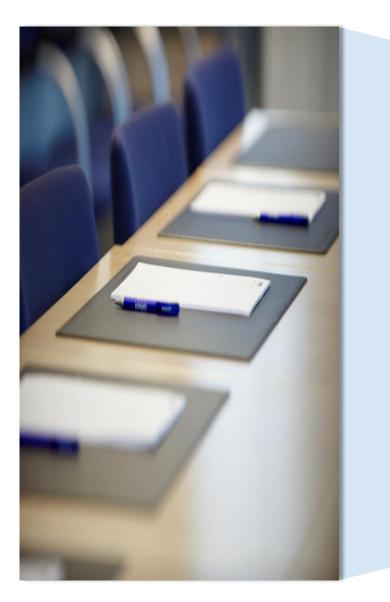


Overview of Open Acreage Licensing Programme (OALP) Under HELP

Sunday, February 10, 2019



1 HELP – A Paradigm Shift for Indian E&P Sector

- 2 India's Hydrocarbon Potential
- 5 Open Acreage Licensing Programme
- 6 **Bidding Structure**
- 8 NDR, EOI and Bidding Portal Manual

Transition from NELP to HELP with Open Acreage Licensing

	NELP		HELP and OALP
*	After Pre-NELP rounds, New Exploration and Licensing Policy (NELP) launched in 1999.		Hydrocarbon Exploration Licensing Policy (HELP) launched in 2016.
*	Production Sharing Contract (PSC) with Pre Tax Investment Multiple (PTIM).	*	Single License for both conventional and unconventional Hydrocarbons.
*	System based on Cost Recovery which meant Audit of Cost lead to dispute and larger regulatory burden.	*	Freedom to carve out blocks, Eols can be made round the year with bidding rounds in 6 months cycles.
*	Government carved out blocks for bidding, investors had little choice.	*	Transition from Cost Recovery mechanism to Revenue Sharing
*	Nine rounds launched since 1999: 254 blocks awarded till date of 156 discoveries have been made.	*	mechanism. Full Marketing & Pricing Freedom.
•••	USD 40 billion invested (till date), further USD 25 billion in the		

- Fiscal Incentives-Low graded royalty rates.
 - Low regulatory burden.
 - Exploration rights on all retained area for full contract life.
 - 100% PI allowed for foreign / private players.
 - USD 5-6 billion in exploration activities and another USD 20-30 billion for development activities is expected.
 - ♦ OALP launched in 2017:
 - Round-I: 55 blocks awarded (59,000 Sq km.)
 - Round-II: 14 blocks (29,000 Sq km.)
 - Round-III: 18 Eols (~30,000 Sq km.), 5 CBM Blocks (1,957 Sq km.)
 - Round-IV: Window open till May 15,2019.

- .
- * USD 40 billion invested (till date), further USD 25 billion in the pipeline.

Fiscal Incentives to Bidders

Fiscal incentives are provided to investors under the Hydrocarbon Exploration and Licensing Policy (HELP) regime

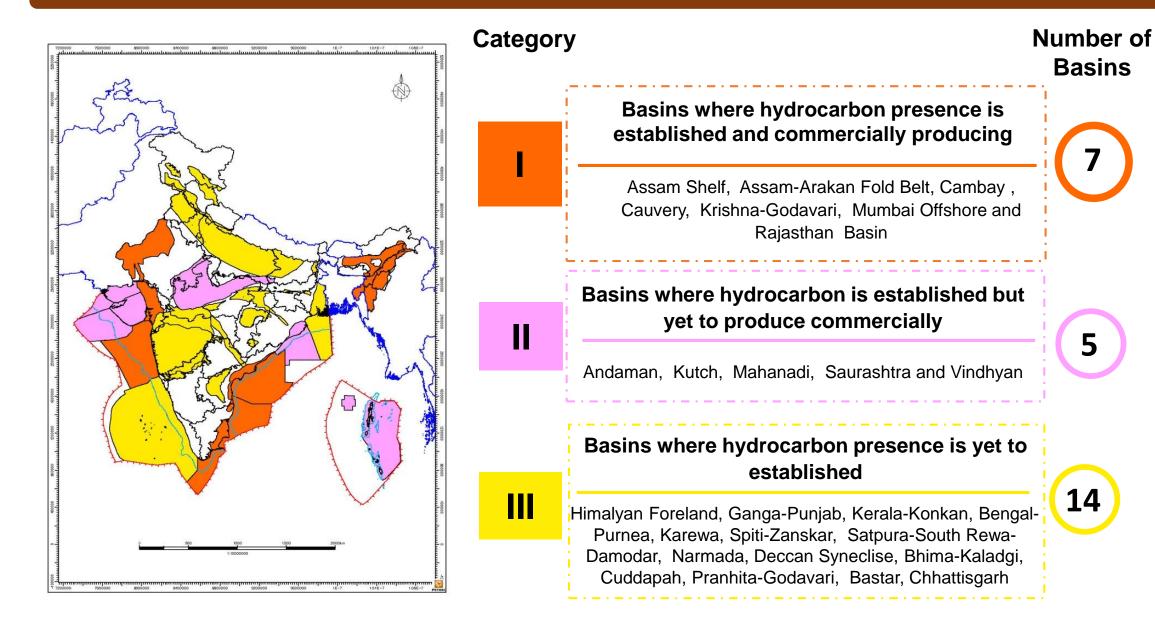
- Low graded Royalty Rates (Deepwater areas, in particular).
- Benefit under Section 42 of Income Tax Act.
- Fiscal incentives of ER/IR policy extended to HELP.

Type of Hydrocarbons	Duration	Royalty Rates (Oil)	Royalty Rates (Natural Gas/CBM)
Onland	Throughout	12.5%	10%
Shallow water	Throughout	7.5%	7.5%
Doop water	First 7 years	Nil	Nil
Deep water	After 7 years	5%	5%
Illtra Doop water	First 7 years	Nil	Nil
Ultra-Deep water	After 7 years	2%	2%

Royalty rates applicable under the HELP are one of the lowest when compared to rates levied by various countries globally

India's Hydrocarbon Potential: Sedimentary Basins

India has 26 sedimentary basins covering an area of 3.36* million square kilometres

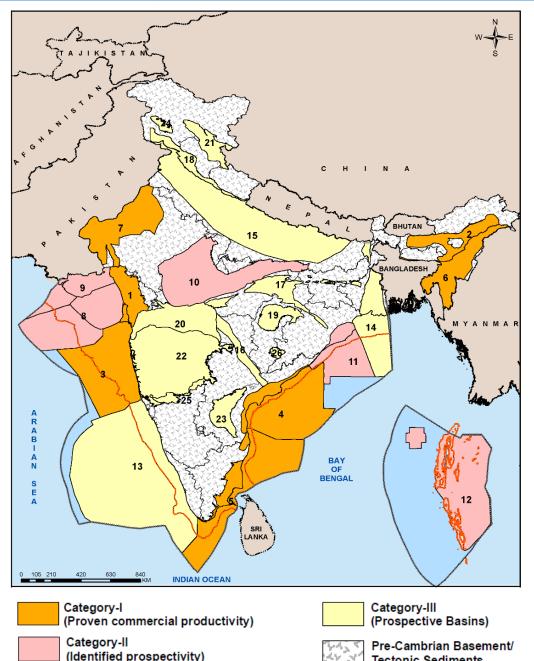


*As per Hydrocarbon Resource Reassessment Study 2017, Subject to approval from MoPNG

5

India's Hydrocarbon Potential: Resource Reassessment

Tectonic Sediments



3.36 Million Sq. Km. of area spread across 26 sedimentary basin

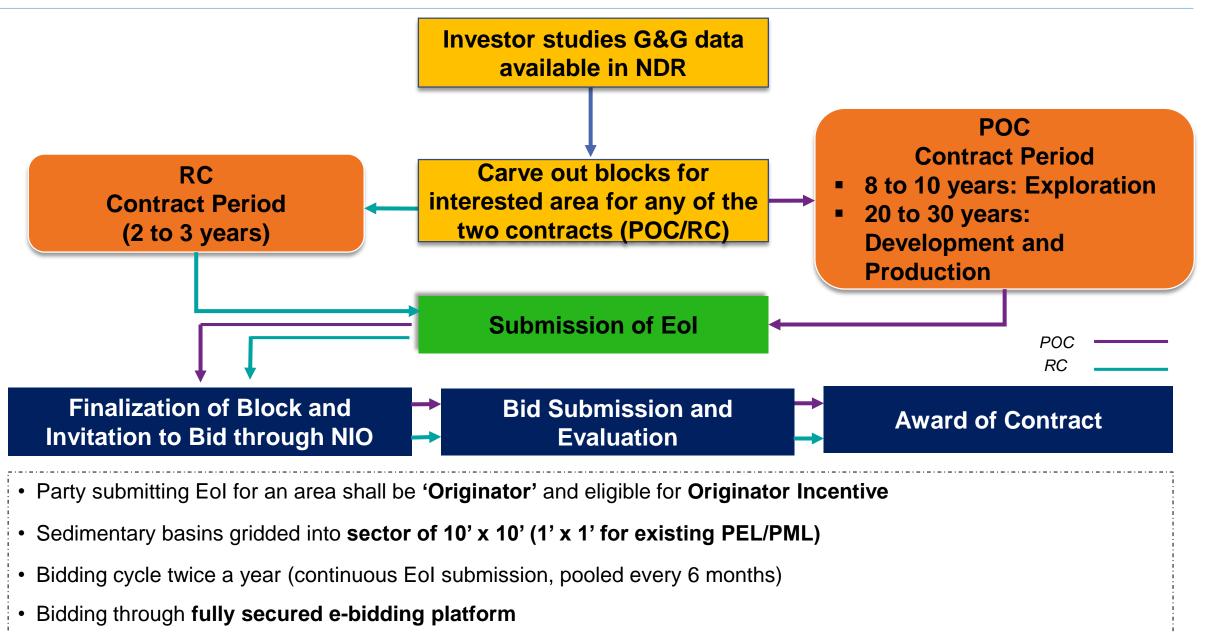
Latest Study indicates hydrocarbon prognosticated resources of 41,872 MMTOE for 26 sedimentary basins and Offshore areas

Discovered HC resources: 12,076 MMTOE Undiscovered HC resources estimate 29,796 MMTOE

About 49,1 % Increase in HC Resources estimates as compared to the earlier study undertaken in 1995-96

Source: DGH, study is under finalization, HC estimates indicated are subject to approval

Open Acreage Licensing Programme: The Process



• Eol for POC would be preferred over RC for same area.

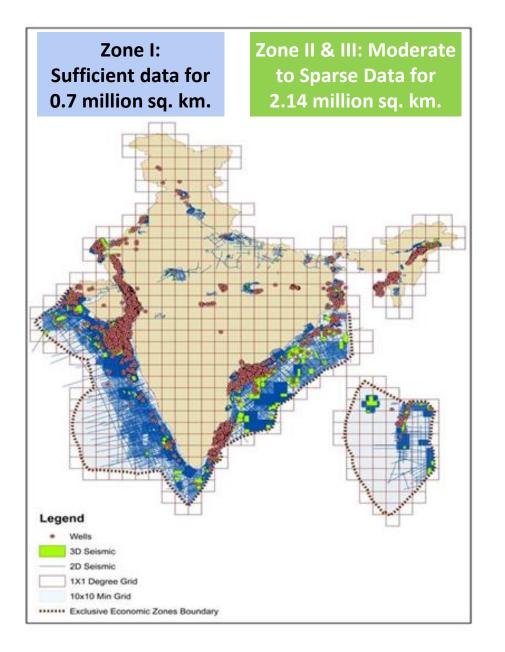
Key OALP Cycle Timelines for Investors

			Timeline (Closing Dates)							
	Key Milestones	Window 1	15 th Nov	31 st Dec	1st Jan	15 th Mar	15 th April	30 th June		
		Window 2	15 th May	30 th June	1 st July	15 th Sep	15 th Oct	30 th Dec		
1	Cut off Date for Bid Rounds				Timing is	s critical	to avail <u>C</u>)riginator'	<mark>s Incent</mark> i	ve
2	Finalization and Review of Eol									
3	Issue of Bid Document					DG	l to Evalu	ate Eols a	and Issue	e NIOs
4	Bid Submission Deadline						ICB	or the ide	entified B	locks
5	Bid Evaluation and Award (on or before)									
6	Contract Signing (on or before)									ntract gning

Current Bidding Timelines

Bidding	Launch	Bid Closing	Contract Award
Round-II	January 2019	March 2019	May 2019
Round-III	February 2019	April 2019	June 2019
Round-IV	July 2019*	September 2019*	November 2019*

Open Acreage Licensing Programme: Area and Data



Bidders can carve out their own blocks (min 10' by 10' Grid, ~336 Sq. Km)

2.84 million sq. km. Area is offered across 26 Sedimentary Basin under OALP

Two types of Investment Opportunities available under OAL

Petroleum Operations Contract (All zones)

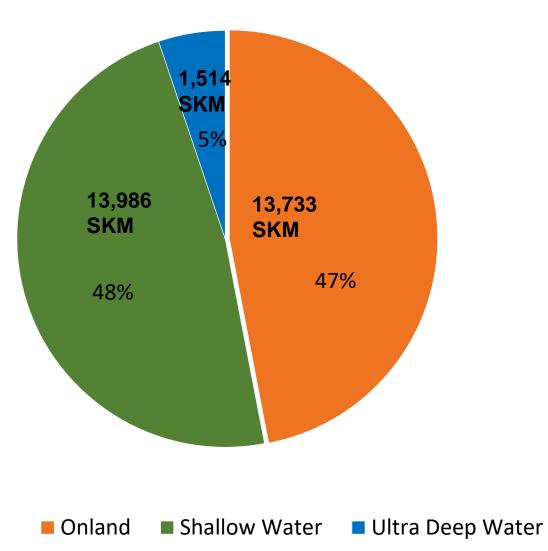
Reconnaissance Contract (only in Zone II & III)

Data available on NDR

- 1.99 million LKM of 2D seismic data
- 0.70 million SKM of 3D seismic data
- 15,712 well log data

Note – Min. 1'X1' Grid allowed for adjoining areas to existing blocks and areas where it is not possible to carve 10'X10' Grid

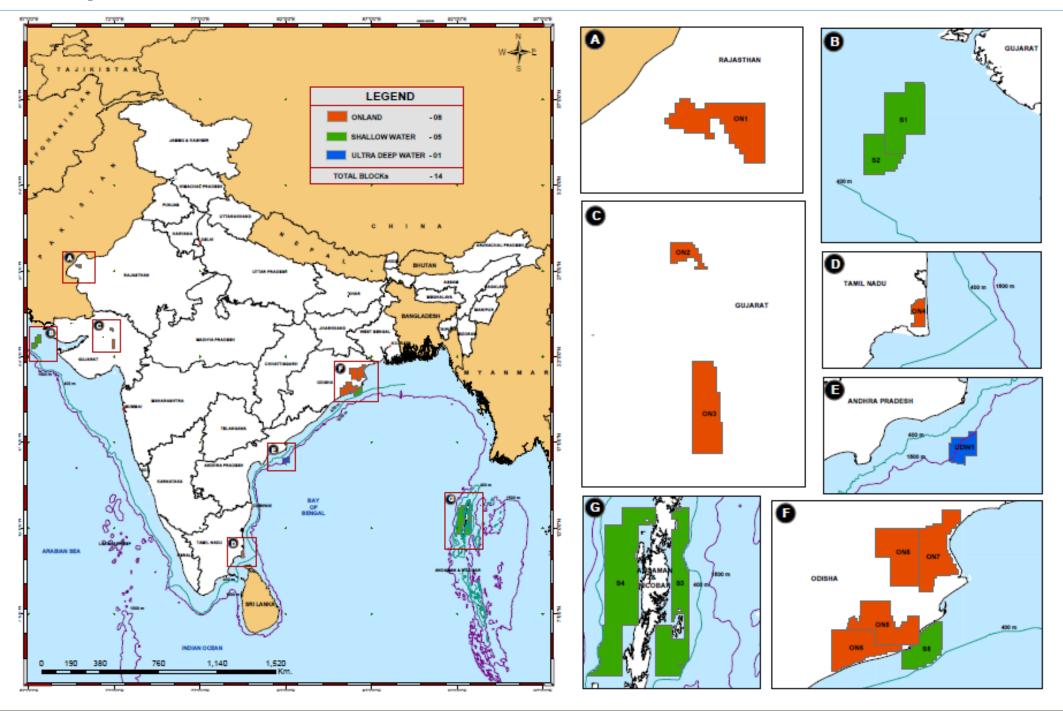
Sedimentary Basin-wise Distribution of offered Blocks under OALP-II



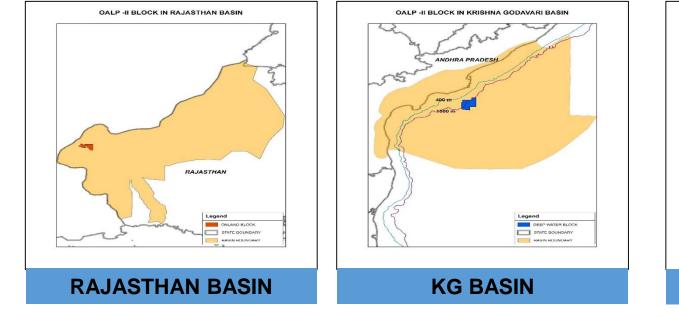
14 Blocks with a total area of 29,233 Sq. km.

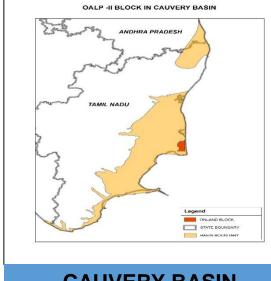
Sedimentary Basin	Number	Area (Sq km.)				
Ultra deep Water						
Krishna Godavari	1	1,514				
	Onland					
Mahanadi	4	11,809				
Cauvery	1	474				
Rajasthan	1	418				
Cambay	2	1,032				
Shallow Water						
Andaman Basin	2	9,617				
Kutch Basin	2	2,544				
Mahanadi	1	1,825				
Total	14	29,233				

Final Maps with distribution of Blocks on Offer under OALP Bid Round-II



OALP-II Blocks on Offer

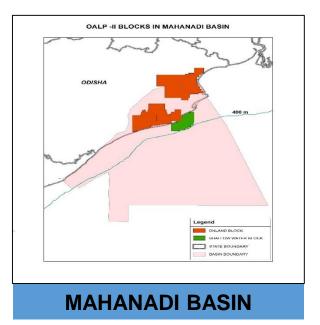


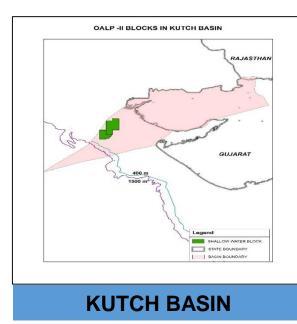


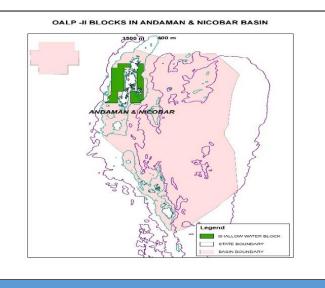
CAUVERY BASIN



CAMBAY BASIN



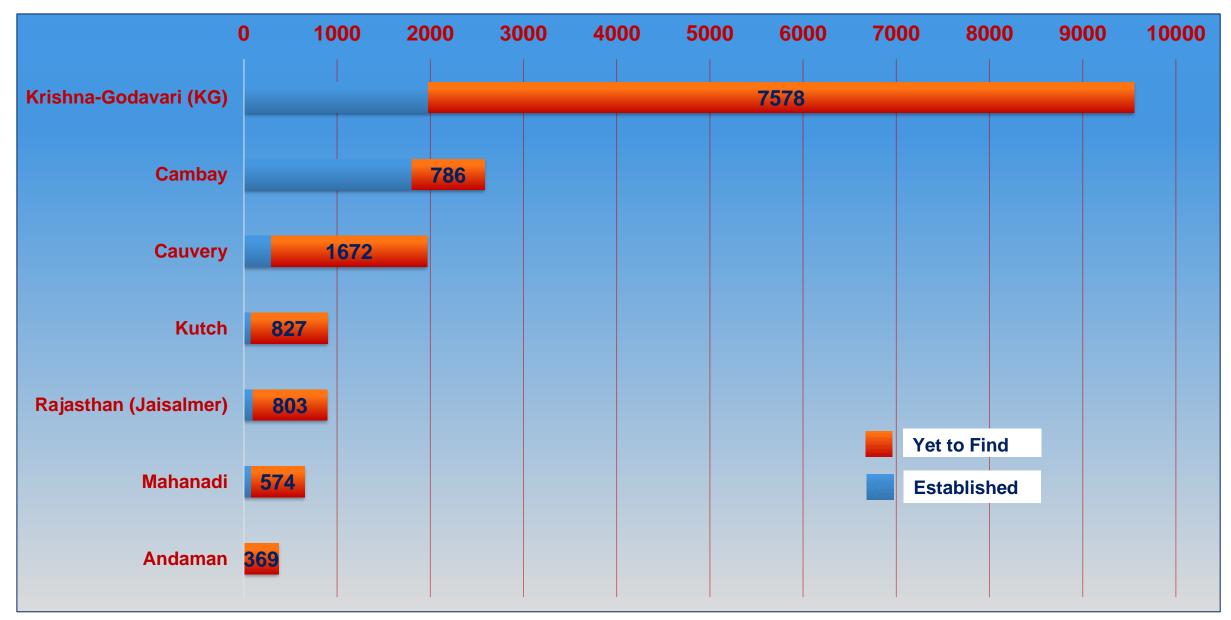




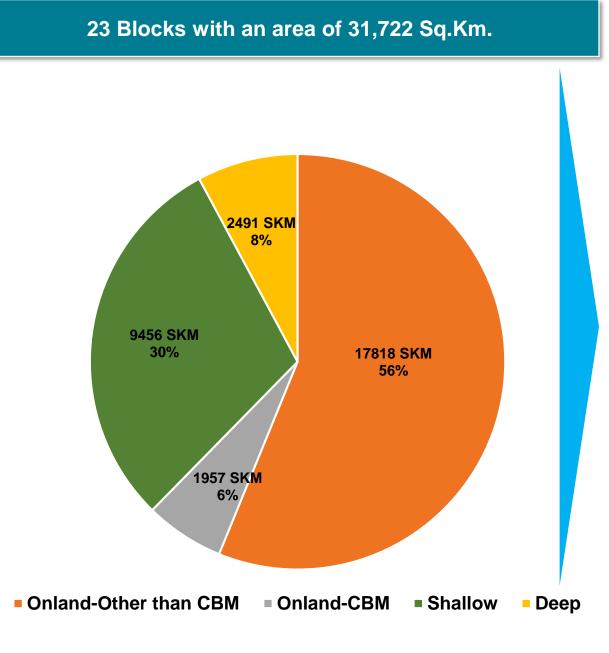
ANDMAN & NIKOBAR BASIN

Resource Potential across Offered Basins under OALP-II

MMTOE



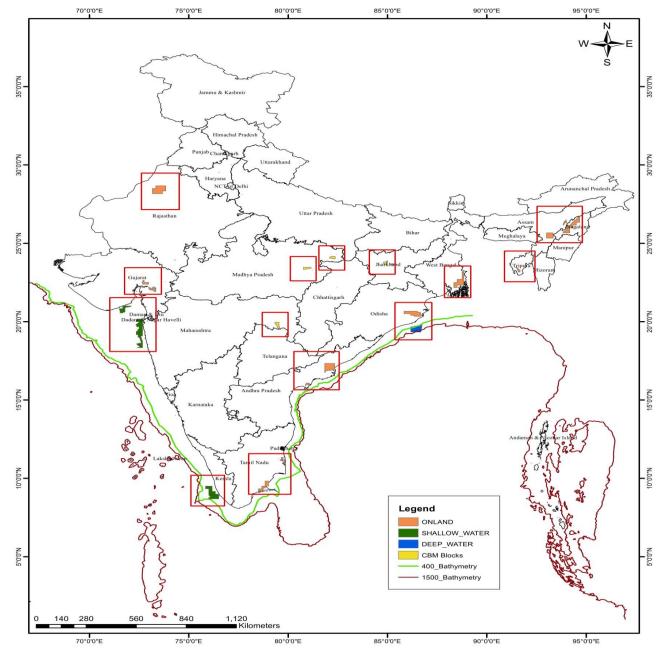
Sedimentary Basin-wise Distribution of Eols under OALP-III



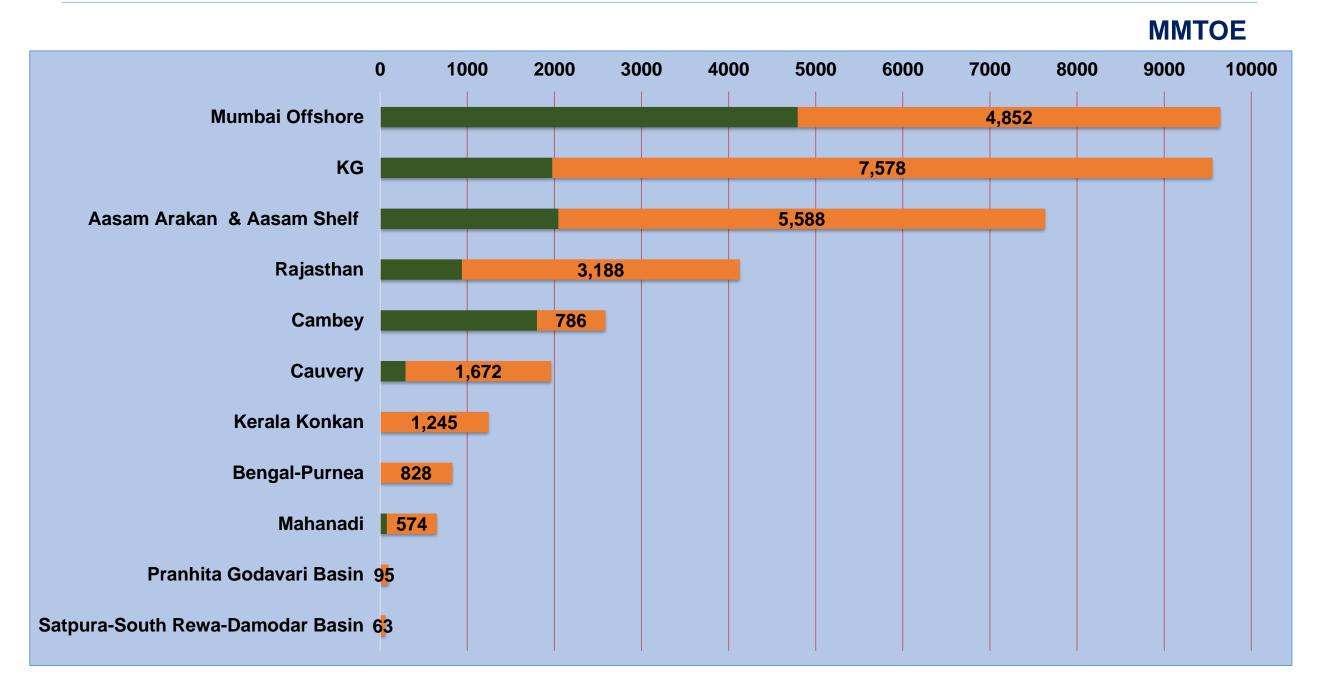
Sedimentary Basin	Number	Area (Sq km.)
Deep V	later	
Mahanadi	1	2,491
Onland (other	than CBM)	
Mahanadi	1	2,300
Assam Arakan & Assam Shelf	5	4,262
Rajasthan	1	3,016
KG	2	2,831
Bengal-Purnea	1	2,468
Cambay	2	1,078
Cauvery	2	1,863
Shallow	Water	
Kerla Konkan	1	3,520
Mumbai Offshore	2	5,936
Total (A)	18	29,765
Onland ((CBM)	
Satpura-South Rewa-Damodar Basin	4	1,332
Pranhita-Godavari Basin	1	625
Total (B)	5	1,957
Total	23	31,722

Final Map of Blocks on Offer under OALP-III

OALP BID ROUND-III BLOCKS



Resource Potential across Offered Basins under OALP-III



Bidding Structure: Petroleum Operation Contract

Two Part Single Stage Bidding

Part – I

Submission of Technical and Financial Qualification information

- Networth for each consortium member as per participating interest and technical qualification only for operator.
- Submission of Bid Bond.

Part – II

Submission of Work Programme and Fiscal Bids.

- Bank Guarantee in lieu of Deficit Networth.
- No marks to be awarded for Technical Evaluation after Part-I.
- Bids compliant after Part-I are evaluated based on combined score of Bid made at Part-II.

Pre-Qualifications to participate in OALP Bidding

Technical Qualifications

Petroleum Operation Contract

- One (1) Year Operatorship Experience in last 10 consecutive Years;
- Positive Acreage Holding in last 10 consecutive 10 years; or
- Positive Average Annual production (MMBoe) for any previous 5 years in last consecutive 10 years.

Reconnaissance Contract

- * 1000 LKM of 2D seismic API experience, or
- ✤ 300 SKM of 3D seismic API, or
- ✤ Drilling experience of at least 5 wells.
- Others surveys like CSEM, Gravity, Magnetic, MT etc for at least 1000 sq km.

Financial Qualifications

Petroleum Operation Contract

Stage I: Eol/Bidding

Originator or /and Bidder required to meet minimum Net Worth Criteria prescribed in OALP Procedure/NIO

Stage II: Bid Evaluation

Furnish Bank Guarantee for any shortfall in Net Worth vis-à-vis LD Value of Work Programme/estimated cost of CWP.

Reconnaissance Contract

- Positive Net Worth at Stage-I
- Net worth to match cost of Work Programme.
- Furnish BG in lieu of Net Worth at Stage-II

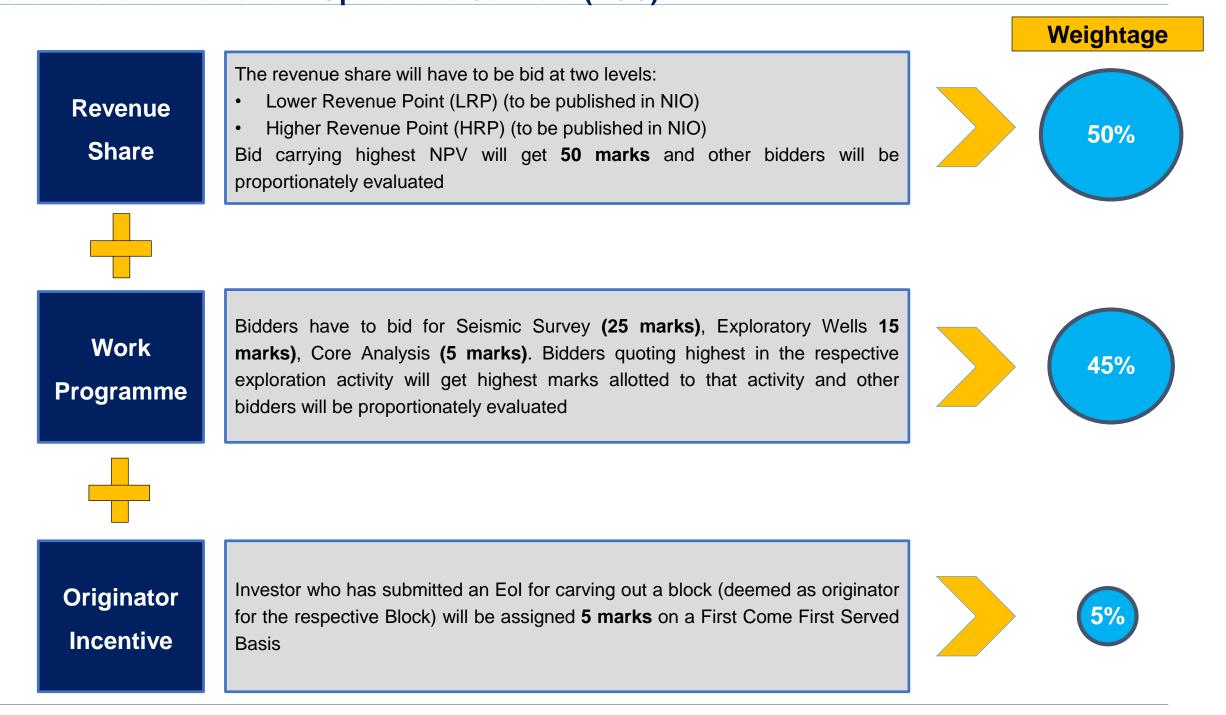
Net Worth requirement under Financial Qualification Criteria

Petroleum Operation Contract

Type of bock	Net-worth for one sector (10'x10') (US\$ mn)	Net worth for additional sectors (US\$ mn/ sector)	Requisite Net worth for maximum no of sectors (US\$ mn)
Onland	5	1	14
Shallow water	20	2	58
Deep water	60	2.5	132.5
Ultra-Deep water	90	3	177
СВМ	2.5	0.5	3

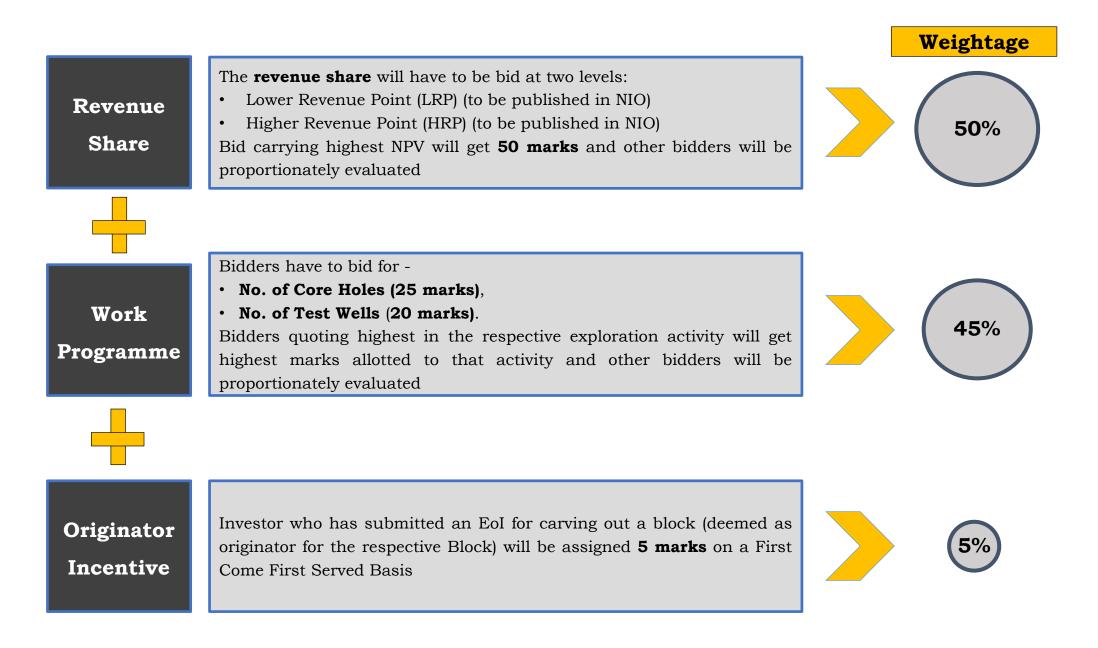
At Bid Evaluation stage, shortfall in Net Worth should be supported by equivalent Bank Guarantee

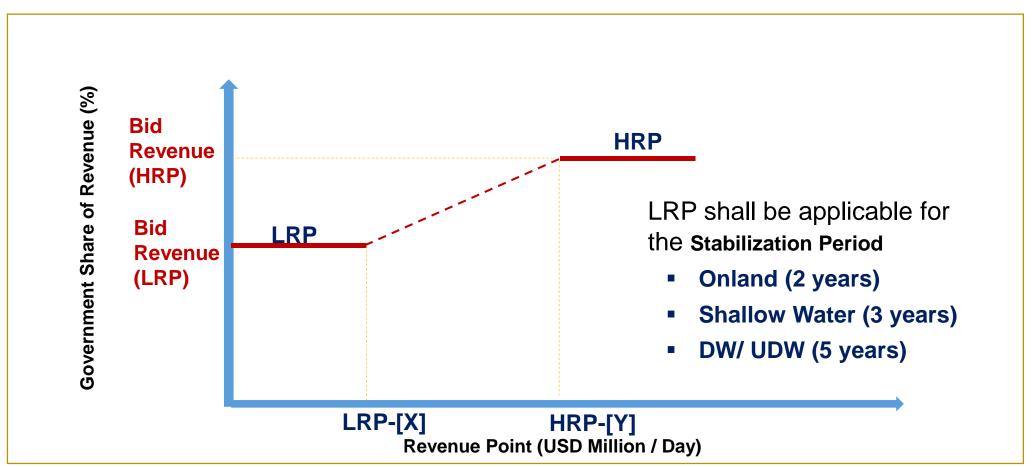
Bid Evaluation Criteria Parameters for Petroleum Operations Contract (POC)



Bid Evaluation Criteria for CBM Blocks

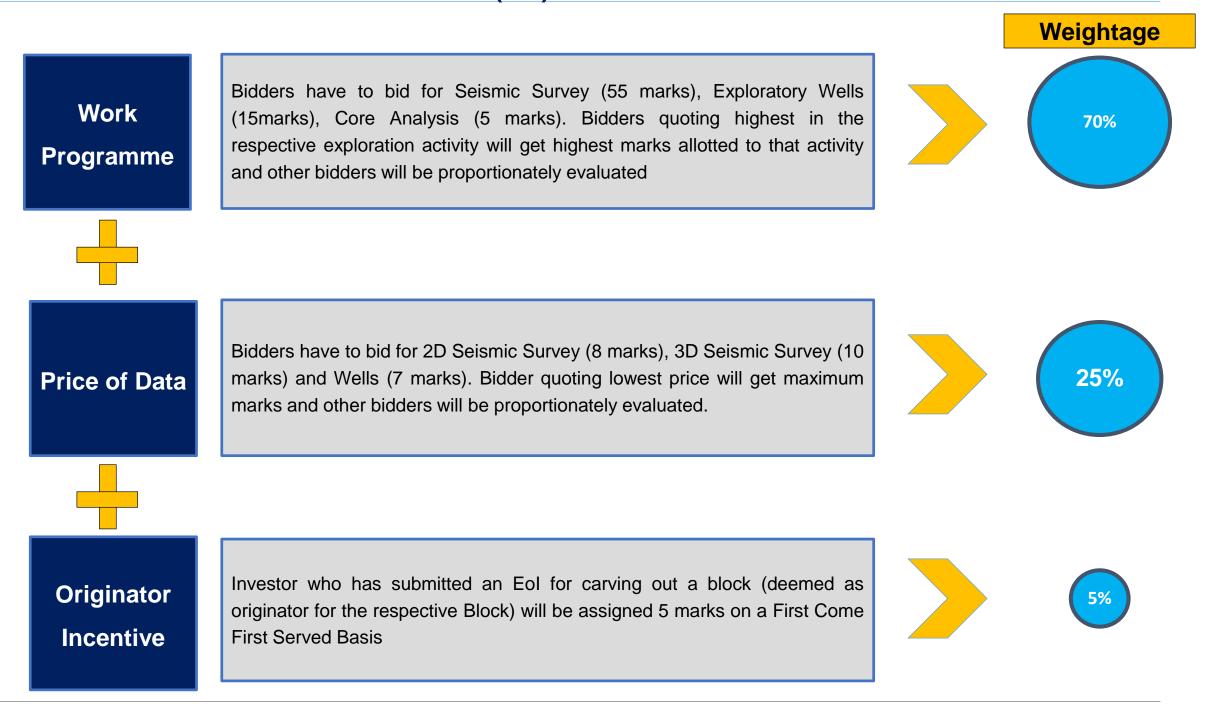
Parameters for Petroleum Operations Contract (POC)



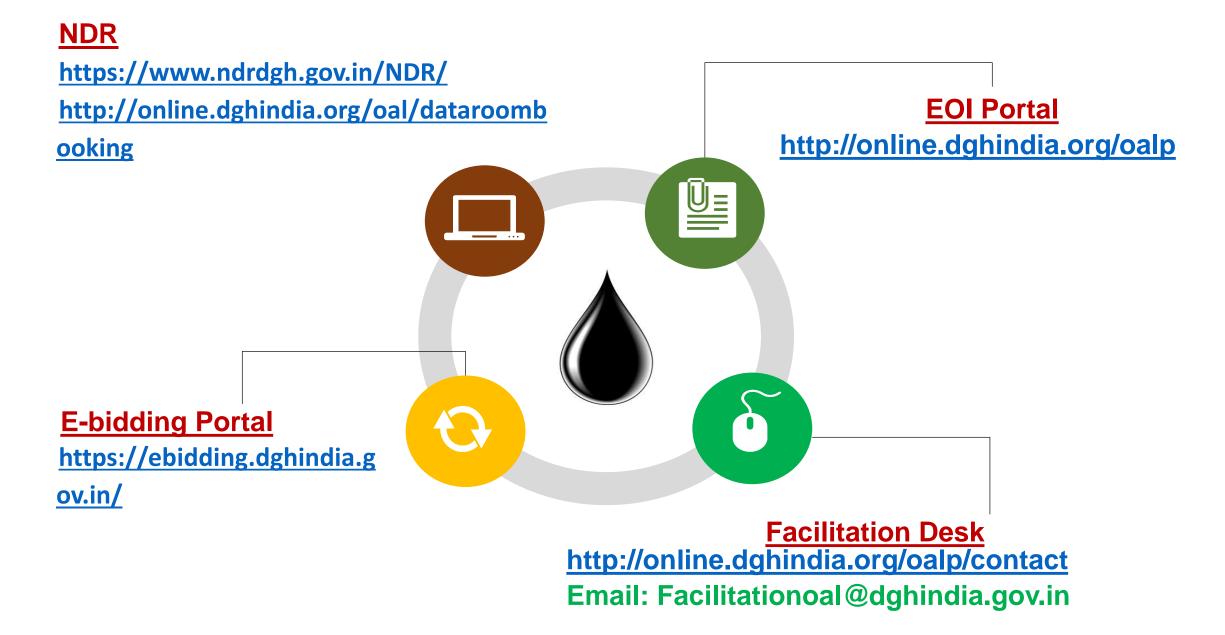


Fiscal Bid-Revenue Share at LRP and HRP

- Bidders to bid the Government Share of revenue (%) against Lower Revenue Point (LRP) ≤ US\$ [X] mn/day & Higher Revenue Point (HRP) ≥ US\$ [Y] mn/day {For POC other than CBM X=.05 mmusd and Y= 7.00 MMUSD} For POC where CBM is primary target X=0.01 mmusd and Y=0.5 mmusd}
- Bidder with highest average NPV of the revenue share (calculated based on four notional revenue profile) scores the highest



OALP Facilitators



Thank you

Directorate General of Hydrocarbons

(Ministry of Petroleum & Natural Gas)

Phone: 0120-2472000, Fax: 0120-2472049 Email: <u>dg@dghindia.gov.in</u> Website: <u>dghindia.gov.in</u>



Qualification and Bid Evaluation Criteria

Technical Qualifying Criteria -Petroleum Operations Contract

SI.	Criteria	Onland	Onland Shallow Water Deep water/ Ultra-de		СВМ	
1	Minimum Operatorship Experience (Experience of operatorship in oil and gas exploration and / or development and / or production in the last consecutive 10 years)	1 year Experience is Mandatory	1 year Experience is Mandatory	1 year Experience is Mandatory	1 year Experience is Mandatory	
2	Minimum Acreage Holding (sq. Km.): (for Onland, Shallow water, Deep water/ Ultra-deep water and CBM)	Positive Optional if Point 3 is fulfilled				
3	Minimum Average Annual production (MMBoe) for the previous 5 years: (for Onland, Shallow water, Deep water/ Ultra-deep water)		Positive Optional if Point 2 is fulfilled			

Operatorship Experience in respective category of block is required for which bidder is applying, subject to:

- a. Operatorship experience in Deep Water/Ultra Deep Water block would be recognized as relevant for all type of blocks.
- b. Operatorship experience in Shallow Water block would be recognized as relevant for Deep Water, Shallow Water and On-land blocks
- c. Operatorship experience in On-land block would be recognized as relevant for On-land and Shallow Water blocks
- d. Operatorship experience in CBM block would be recognized as relevant for On-land blocks

Technical Qualifying Criteria-ReconnaissanceContract

The bidder for Reconnaissance or EOI submitting party must have any one of the following experience:

- 1000 LKM of 2D seismic API experience, or
- 300 SKM of 3D seismic API, or
- Drilling experience of at least 5 wells.
- Others surveys like CSEM, Gravity, Magnetic, MT etc for at least 1000 sq km.

Bids/EoIs which do not meet the above PQ requirement would be rejected.



Financial Pre-Qualification

Financial Pre-Qualification Criteria and a two stage evaluation of Net worth criteria has been introduced

For Petroleum Operations: At EoI stage/Bidding State, Originator is required to meet the following minimum Net worth criteria

Type of bock	Net-worth for one sector (10'x10') (\$ mn)	Net worth for additional sectors (\$ mn/ sector)	Requisite Net worth for maximum no of sectors
Onland	5	1	14/34
Shallow water	20	2	58
Deep water	60	2.5	132.5
Ultra-Deep water	90	3	177
СВМ	2.5	0.5	3

Bids that do not meet the above PQ criteria shall not be processed further for Bid Evaluation.

<u>At the Bid Evaluation Stage</u> Networth of the bidder would be reassessed at the time of technical bid opening. At this stage, Net worth of the bidder should be equal to or more than the higher of:

- a) Estimated expenditure for the Committed Work Programme
- b) LD equivalent value of the Committed Work Programme

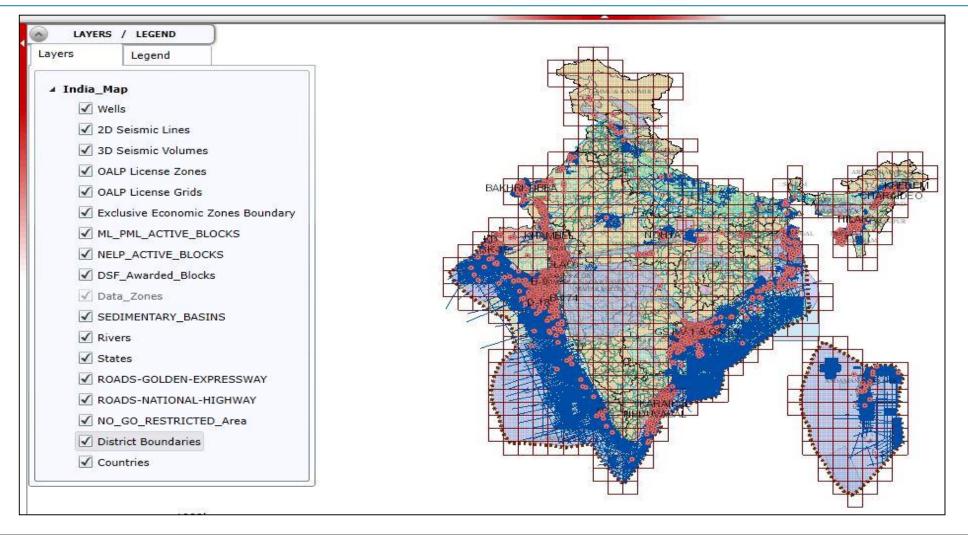
Any shortfall in Networth is allowed to be supported by an equivalent Bank Guarantee.

For Reconnaissance Contract: requirement is positive Networth at EoI stage and Networth to match Work Programme cost at bidding stage (deficit can be met by Bank Guarantee)

Accessing Geoscientific Data from NDR

- 1 Register at NDR site <u>https://www.ndrdgh.gov.in</u>
- 2 Login with your NDR credentials and the Landing Page will be as given below:

3 Exploring NDR Database



National Data Repository- Physical Data View Room

Available for the offered Blocks at DGH Office Noida

For Booking, please visit

http://online.dghindia.org/oa l/dataroombooking Data Rooms at other locations to be announced.

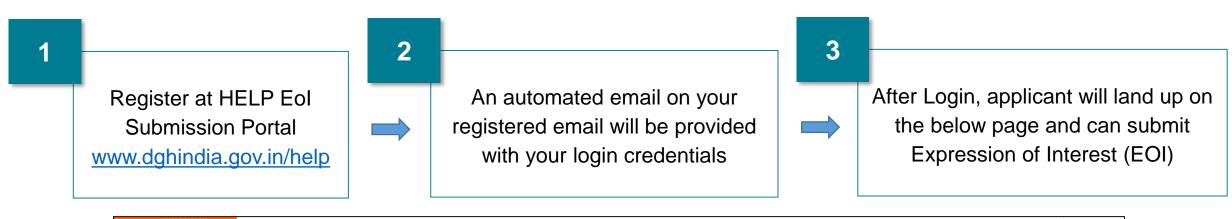
PAN (Indian Users) / CIN (Foreign Users) Number of the Company is mandatory.

Payment to be made online as per the number of days. After payment, an automated confirmation receipt will be sent to the users email.



Confirmation Receipt required during visit to the Data Room

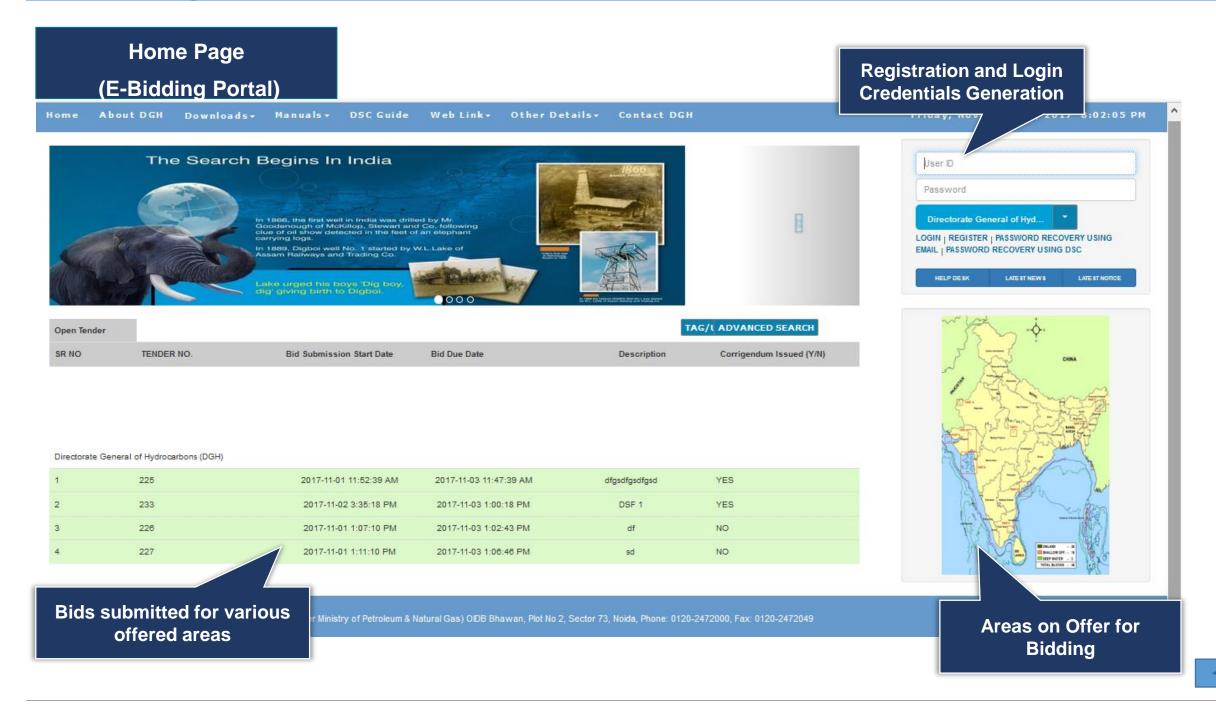
Eol Submission Portal



Control	Submission of Eols will be entertai List of Fols	submitted by applicant			
Your Eol Submission Status Image: Col NA. Image: SectorAs Image: Col NA. Imag					
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i-12323 Under Process	PLEASE CHECK THE STATUS OF ALREADY SUBMITTED E Show 10 ▼ entries LIST OF EOIS SUBMITTED BY OTHER PARTIES 1-00073, 1-00089, 1-00062-090, 1-00091, 1-00090, 1-00101, 1-60036-100, 1-60036-001 1-00505, 1-00608, 1-60021-006, 1-00608-005, 1-00 1-01011, 1-01012, 1-01013, 1-02002, 1-02001, 1-0050	EOIS BELOW. IN CASE ANY OF THE ALREADY SUBMIT 1-00062-091 1505-002, i-60021	TED EOIS CONTAINS THE AREA WHICH YOU ARE INTE	NDING TO SUBMIT, YOUR EOI WILL BE REJECTED AN	Search: Search: Status Status Approved Under Process Under Process Under Process Under Process



E-Bidding Portal for RC and POC



Requirement for bidding through E-Bidding Portal

1 Class 3 Digital Signature – Bids are signed and encrypted using Class 3 Digital Signature.

Requisite Documents as per NIO – Pre-qualification, Technical Details and other Documents (including Operatorship Experience, Acreage Holding and average annual production, Net Worth Certificate, Incorporation Certificate, Audited Financial Statements and Other Relevant Documents) need to be submitted online and in hard copy.

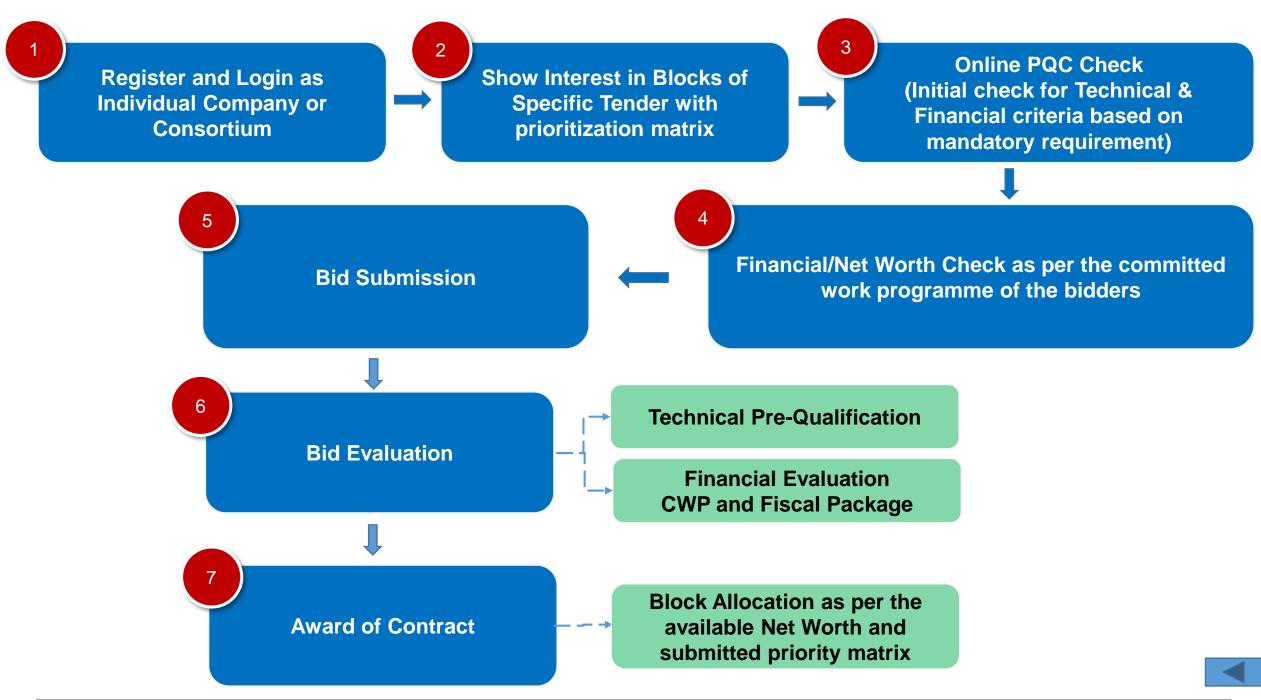
3 Bid Components – Bid components (CWP & revenue share) to be furnished online.

4 Tender Fee – Tender Fee shall be paid through online payment gateway.



Bank Guarantee – Scanned copy of Bank Guarantee of requisite amount needs to be submitted online and in hard copy.

Flow Chart for submitting bid on E-Portal



Hydrocarbon Resource Reassessment 2017

Resources of 1995-96

Total Hydrocarbon assessed resources (in place) estimated for **15** sedimentary basins across onland, shallow water and deep water areas in 1995-96

28,085 MMTOE

Reassessed Resources of 2017

Total Hydrocarbon reassessed resources (in place) estimated for **26 sedimentary basins** across onland, shallow water and deep water areas in the present study

41,872 MMTOE

Discovered Resources	Undiscovered Resources
Discovered Hydrocarbons	Undiscovered Hydrocarbons
12,076 MMTOE	29,796 MMTOE

Increase of Hydrocarbon resource estimates by

49.1%

FISCAL INCENTIVIZATION POLICY FOR ADOPTING ER/IR/UHC METHODS

Policy to promote and Incentivize Enhanced Recovery Methods for Oil and Gas

- Policy notified on 10th October,2018;
- Applicable to all oil & gas fields of all contractual regimes and Nomination Acreage.
- Objective is to provide **fiscal incentives** to adopt-
 - 1. Enhanced Recovery(ER) Methods includes EOR and EGR. Methods e.g. Hot water Injection, Polymer Flooding, CO2 Injection, Microbial Flooding etc. given in Annexure II to policy;
 - 2. Improved Recovery(IR) Methods-Any efforts made to increase production beyond current recovery (ratio of cumulative production of oil/gas at the end of last fiscal year to "in place volume") of-

a.60%-Oil Fields

b.80%-Gas Fields;

- **3. Unconventional Hydrocarbon (UHC) Production Methods** which includes Shale oil/gas production, tight gas production, Production from Oil shale or gas hydrates etc.
- 4. Policy effective for 10Years from the date of notification in official gazette.

- Fiscal incentive will be available for a period of 120 months (10Years) from—
 1.In case of ER/UHC Projects- the date of commencement of commercial production
 - **2.In case of IR Projects-** the date of achievement of prescribed benchmark of recovery rate.
- Fiscal incentive will be provided on-

1.In case of ER Projects- incremental production.

2.In case of IR Projects- entire production beyond benchmark

3.In case of UHC Projects- entire production

- Screening of fields for implementing ER Methods would be mandatory.
- Pilot should be initiated immediately after the approval of ER screening report. It is not mandatory for small size oil fields.

- Submit application to avail fiscal incentive-
 - 1. In case of ER Projects- within 12 months of pilot review
 - 2. In case of IR/UHC Projects-within 7 years from the date of notification of policy.
- Eligibility of fields to avail fiscal incentives-
- A. Fields currently not producing oil and gas using ER Techniques-
 - 1. In case of ER Projects- having a minimum 3 years of commercial production
 - **2.** In case of IR Projects- on crossing the benchmark of increasing production beyond current recovery of 60% or 80% as the case may be.
 - **3.** In case of UHC Projects- from the start of commercial production
- B. Fields currently producing oil and gas using ER Techniques- Not Eligible, however, eligible for future ER
- Constitution of ER Committee to approve ER Pilot and ER/IR/UHC Projects. It will develop criteria for measuring the incremental production.

Fiscal Incentives					
Fiscal Incentive Parameters	Oil Production Projects	Gas Production Projects (Incentive ceiling USD 0.4/ mmbtu-Offshore and USD 0.3/mmbtu-onshore fields)			
A-OID Cess Applicable-OID Cess Wa	aiver*/ Royalty Waiver in case of gas production projects of	except nomination fields			
ER Projects	50% of Cess on incremental production of crude oil from designated wells.	75% of applicable royalty on incremental production of gas from designated wells.			
IR Projects	50% cess on entire production after crossing the prescribed recovery rate	75% of applicable royalty on entire production after crossing the prescribed benchmark recovery rate.			
UHC Projects50% cess on entire commercial production of unconventional oil production75% of applicable royalty on entire com production.					
Oil Cess waiver in case of Gas Production Projects of Nomination Fields	NA	Equivalent to 75% of royalty against OID cess payable on crude oil from any field of NOCs, preferable from on land crude production.			
B-OID Cess Not Applicable (For Oil Projects)** / In case of onshore fields where royalty is received by StateCalculate notional cess waiver and reduce equivalent amount from- Profit Petroleum- NELP Blocks Gol revenue share- OALP and DSF BlocksSet off incentive amount from Gol share of- Profit Petroleum- NELP Blocks Gol revenue share- OALP and DSF BlocksB-OID Cess Not Applicable (For Oil Projects)** / In case of onshore fields where royalty is received by State Gol revenue share- OALP and DSF BlocksSet off incentive amount from Gol share of- Profit Petroleum- NELP Blocks Gol revenue share- OALP and DSF Blocks					
**In case there is no profit petroleum or revenue share- carry forward incentive amount for 120 months.					
* Available only when Average crude oil price of Indian Basket declared by PPAC during calendar month BELOW ceiling/ER reference rate initially USD 80/barrel of crude oil. However, this period will not be deducted from overall tenure of incentive period.					
Upper ceiling on fiscal incentive- Cumulative waiver shall not exceed the total CAPEX incurred for undertaking ER/IR/UHC methods.					

Annexure	Content
Ι	Definition and meaning of terms used in the policy
II	List of Enhanced Recovery Techniques
III	ER screening report and approval procedure
IV	Approval procedure for ER/IR/UHC Projects
V	Role and Functions of Enhanced Recovery (ER) Committee

ER/IR/UCM Policy-Fiscal Incentives

Fiscal Incentive Parameters	Oil Production Projects	Gas Production Projects (Incentive ceiling USD 0.4/ mmbtu-Offshore and USD 0.3/mmbtu-onshore fields)	
A-OID Cess Applicable-OID Cess Wa	aiver*/ Royalty Waiver in case of gas production projects	except nomination fields	
ER Projects	50% of Cess on incremental production of crude oil from designated wells.	75% of applicable royalty on incremental production of gas from designated wells.	
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UHC Projects	50% cess on entire commercial production of unconventional oil production	75% of applicable royalty on entire commercial production.	
Oil Cess waiver in case of Gas Production Projects of Nomination Fields	NA	Equivalent to 75% of royalty against OID cess payable on crude oil from any field of NOCs, preferable from on land crude production.	
B-OID Cess Not Applicable (For Oil Projects)** / In case of onshore fields where royalty is received by State Government (For Gas Projects)**	Calculate notional cess waiver and reduce equivalent amount from- Profit Petroleum- NELP Blocks GoI revenue share- OALP and DSF Blocks	Set off incentive amount from GoI share of- Profit Petroleum- NELP Blocks GoI revenue share- OALP and DSF Blocks	
	**In case there is no profit petroleum or revenue share- carry forward incentive amount for 120 months.		
	price of Indian Basket declared by PPAC during calendar mo riod will not be deducted from overall tenure of incentive pe		
✤ Upper ceiling on fiscal incentive- Cur	mulative waiver shall not exceed the total CAPEX incurred f	for undertaking ER/IR/UHC methods.	