

Vendor's Meet 2010

Exploration activities
by
Exploration Group

Acreages held by ONGC (PEL + NELP)

Type	PEL Blocks	Area (Sq.Km)	NELP Blocks (I-VII)	Area (Sq.Km)
OnLand	45	24421	30	54283
Offshore-SW	12	21099	9	27315
Offshore-DW	5	35024	31*	341493
TOTAL	62	80544	70	423091

* Includes SW awarded block MN-OSN-2000/2 wherein existing area falls beyond 400 m bathymetry

Work Programme (Seismic) – XI th Plan Acquisition

Year	2D (LKM)			3D (SqKm)			Remarks
	Dept.	Outsource*	Total	Dept.	Outsource*	Total	
2007-08	879	7279	8158	5072	14288	19360	Actual
2008-09	2123	75001	77124	5707	21075	26782	Actual
2009-10	4253	20740	24993	4283	17459	21742	Actual
2010-11	4599	20866	25465	2903	20458	23361	Planned
2011-12**	60	----	60	1902	5750	7652	Projected

* Majority of outsource 2D / 3D work is in offshore

** Work Programme as per XI plan and will be reviewed depending upon award of new NELP blocks

Quantum of Seismic P & I

	2009-10 (Actual)	2010-11 (Target)
■ Processing		
2D(LKM) :	78857	32024
3D(SqKm) :	65596	43369
■ Interpretation Projects :	185	209
(G&G and labs)		

Seismic Surveys (API) – Budget (In Rs. Crores)

Year	ONLAND			OFFSHORE			Grand Total
	2D	3D	Total	2D	3D	Total	
2008-09	137.6	635.7	773.4	540.4	1978.4	2518.8	3292
2009-10	236.3	594.6	830.8	194.91	2027.2	2222.1	3053
2010-11	160.4	368.3	528.8	14.5	1685.3	1699.9	2229

Work Programme (Expl. wells)

Year	Target			Actual		
	Onland	SW	DW	Onland	SW	DW
2009-10	108	33	7	91	28	9
2010-11	106	33	15	18	7	1
				Actual as on 01.07.2010		
2011-12*	84	24	7			

* As per XIth Plan

Out lay for Expl. Drilling

- Exploratory Drilling

2009-10 : Rs. 3628.12 Crores

2010-11 : Rs. 8470.17 Crores

Reserve Accretion - XIth Plan

Years	Initial In Pace Reserve (IOEIP) - MMToe	Remarks
2007-08	182.23	Actual
2008-09	284.81	Actual
2009-10	250.6	Actual
2010-11	224.5*	Projected
2011-12	272.9*	Projected

* As per XI Plan

Exploration Group success depends upon

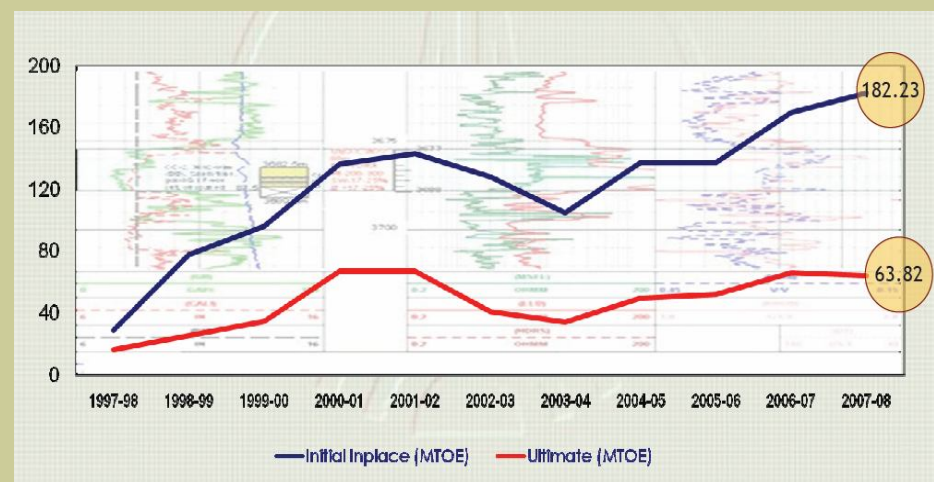
- *Users adopting latest technologies to refine methodologies to enhance Reserve Accretion*
- *reduction of risk factor*
- *Cost effective operations to reduce the finding cost*
- *Improving Recovery Factor*
- *Monetization of discoveries*
- *Services rendered by the vendors*

Increasing trend of Reserve Accretion since 2004-05

can be attributed to

- *Use of state of art technology in seismic data acquisition, special processing software for better imaging techniques (PSTM/PSDM), and induction of high end interpretation software & workstations*
- *Cooperation with technology / service providers*

IIP Accretion in last 10 years



Challenges in Exploration

- Seismic Imaging in Hilly terrains
- Sub-Basalt Imaging
- Long Offset Processing & Interpretation
- Multi-component Seismic API
- Imaging of thin reservoirs
- De-risking of Deepwater Prospects
- Reduction in API cycle
- Longer drift & horizontal drilling
- Basement Exploration
- Shale Gas Exploration

To maintain the increasing trend of Exploration success, the need of the hour is

- *A solution based approach with involvement of major service providers*
- *Adoption of advanced technologies and services for better illumination of exploration targets*
- *Developing expertise with collaborative approach*

Services presently being received

Geophysical Services

- Seismic Data Acquisition
 - 2D – Land, Marine, OBC and Transition zone*
 - 3D – Land, Marine, OBC*
 - Onland : Seismic Job Services & Shot Hole Drilling*
- Seismic Data Processing
 - Special Processing Techniques – PSTM / PSDM, AVO, Inversion*
 - AMC for Hardware & Software*
- Seismic Data Interpretation
 - Special Interpretation projects for prospect evaluation by domain experts for second opinion*
- Procurement of Capital / Spare items
 - Seismic data Acquisition Systems & accessories*
 - PC Cluster Systems for Processing, PC based Interpretation S/W*
 - High end workstations for interactive interpretation*
 - Seismic data processing and interpretation software packages*

Contd....

Services presently being received

- Contractual Logging Services
 - ❖ Wire line logging -Perforation-TCP/DST, Well Shuttle Service, LWD Services & MLU Services
- Geochemical Surveys
- AMC services for H/W and SW
- Consultancy and Work Association
 - Petroleum System Modeling of various sedimentary basins
 - Structural Modeling
 - Shale Gas Consultancy
- Specialized & focused training
 - Development of Exploration Action Learning Plan
- 19 IOR/EOR schemes in 15 major fields
- Micro CT, High Pressure Air Injection, Underground Coal Gasification
- Geo-Mechanical Surveys
- Services for CBM Project

ISSUES

Contd....

- *Deployment of seismic vessels*
- *Support for providing stores and spare items*
- *Rates quoted for proprietary items*
- *Supplying proprietary stores and spare items*
- *Discontinuance of support for systems other than Linux*

ISSUES

Contd....

- *Acceptance of ONGC's standard terms & conditions for service contracts specifically in the clauses like arbitration, jurisdiction law, patent indemnity, interpretation liability and other related techno-commercial and legal*
- *Monopolistic attitude in PAC & nomination cases*
- *Acceptance of provisions of Integrity Pact*

ISSUES

Contd....

- Limited no. of reputed suppliers of logging equipment and service providers are available at the international level. This limits the competition.
- All the reputed logging vendors are not having all the services/ technology. Vendors do not sell full or some of the technologies.
- Long Lead time for PAC/OEM supply.
- Equipments are procured on ten years life cycle basis. ONGC needs commitment of support i.e. supply of spares and replacement / additional tools from vendors at reasonable prices. ONGC is facing difficulty in this respect.

ISSUES

For Shale Gas Consultancy

- *Being a R&D project , first of its kind in India, many standard / model clauses do not fit to requirement and vendors are reluctant to accept in present form*
- *Rate reasonability in such cases is major challenge as such jobs do not have precedence and global rates are always very high.*

Scope of future Work

■ Requirement of Seismic Surveys: 2D & 3D

Volume based survey – Land and Marine

Charter hire of vessels for long term for offshore

OBC & Transition zone surveys (need based)

Multi Azimuth and wide Azimuth surveys (need based)

■ Procurement of New Seismic Vessel : *Dual Source and Multi streamer* : *Consultant has been hired and procurement to follow*

Scope of future Work

Contd....

Induction of proven Technologies (need based)

- *Seismic : High Density single sensor surveys, Multi-Component, 4C- 4D, 4D, EM Pulse Seismic Source, Passive Seismic*
- *Non – seismic methods : CSEM, MTEM, AEM, Airborne GM and HRM*
- Processing of long offset and multi-component data
- Processing of MAZ and WAZ data
- Full corporatization of interpretation S/W

Scope of future Work

Contd....

- Development of Exploration action learning plans for Knowledge Management
- Basin centered Gas, Tight Gas, Shale Gas exploration
- MOU for collaboration on Exploration projects
- Services for CBM project
- Equipment and services related to Geo-microbial & Geo-tectonic studies.

Scope of future Work

- ❖ Procurement of Logging Units & Tools 9 (5 Open Hole & 4 Cased Hole-Production Logging Units) as replacement in on land locations. Tender is likely to be floated in August 2010.
- ❖ 11 Logging While Drilling (LWD) units and tools will be hired from Dec 2010 onwards for three years. Tender is opened and is under evaluation
- ❖ Tender for hiring of 9 additional MLUs is floated. Pre bid scheduled for 27th July 2010. Next tender for hiring of about 50 nos. of MLUS is likely to be floated in Dec. 2011.

Expectations from Vendors

- Cooperation / Collaboration for addressing the E&P problems
- Building partnership for the long term
- Balance of commitment and competition
- Negotiating to a win-win agreement
- Come together on value
- Compliance of Quality Parameters
- Adherence to timelines

Thank You