



Alphageo India Ltd: Creating a Blast





Introduction

- ❑ First Indian private company to commence seismic operations in India
- ❑ Providing integrated geophysical services covering onland seismic data acquisition, processing and interpretation, for over two and half decades
- ❑ Identifying subsurface conditions conducive to the accumulation of oil and natural gas
- ❑ Providing 2D and 3D seismic services through advanced state of art proven technology, knowledge
- ❑ Years of experience working in areas of diverse cultures, extreme environmental sensitivity and areas with industrial variables
- ❑ Offering the most innovative, cost effective and efficient acquisition and processing solutions to our clients
- ❑ Headquartered in Hyderabad, Listed in BSE and NSE



Industry Overview



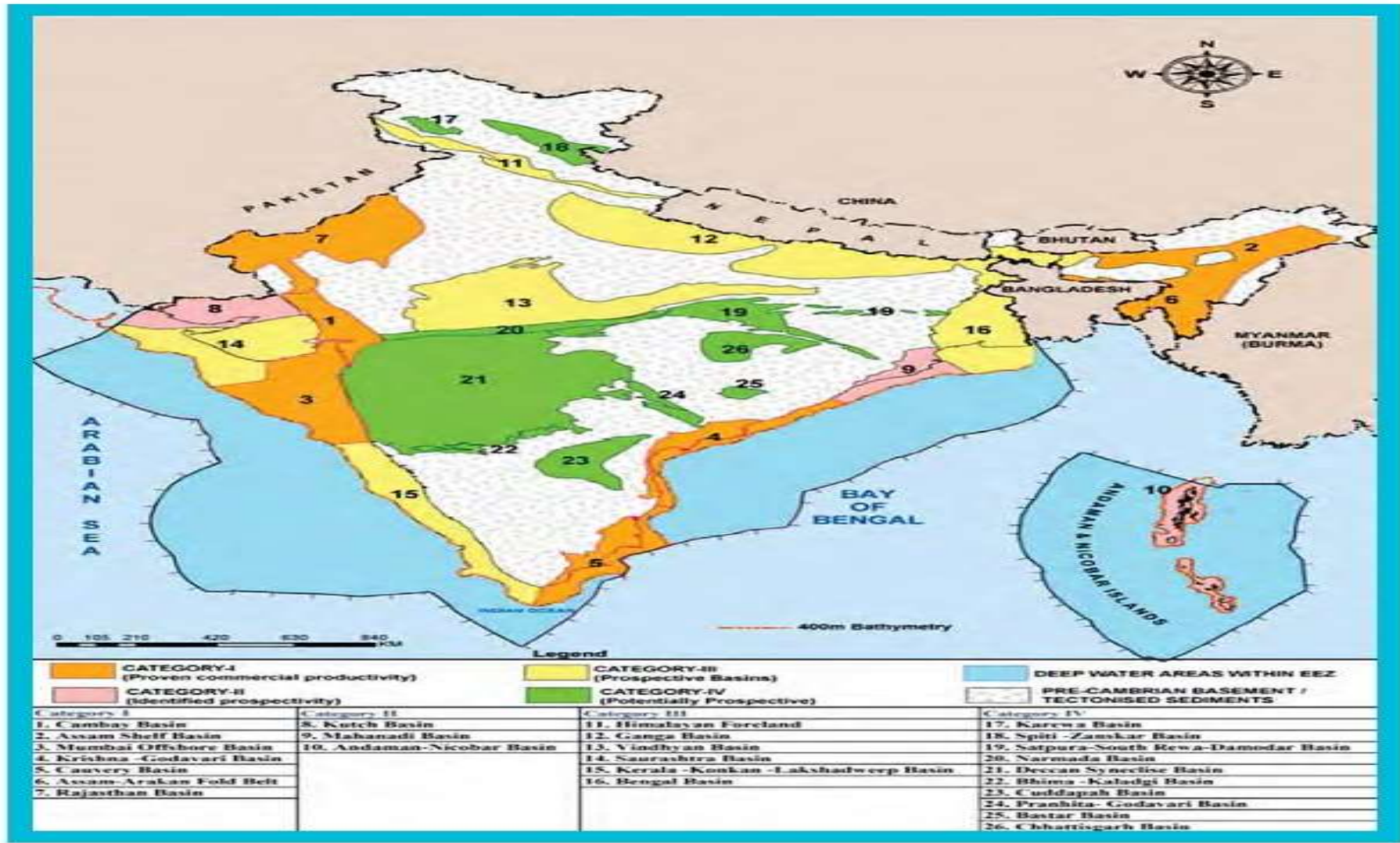


What is Seismic Survey?

- ❑ Reflection seismology (or seismic reflection) is a method of exploration geophysics that uses the principles of seismology to estimate the properties of the earth's subsurface from reflected seismic waves
- ❑ The method requires a controlled seismic source of energy, such as dynamite / specialized air gun
- ❑ The typical seismometer used in a reflection experiment is a small, portable instrument known as a geophone, which converts ground motion into an analog electrical signal. In water, hydrophones, which convert pressure changes into electrical signals, are used
- ❑ This reflection seismology is extensively used in exploration for hydrocarbons (i.e., petroleum, natural gas) and such other resources as coal, ores, minerals, and geothermal energy. It is commonly used to map the subsurface structure of rock formations



Sedimentary Basins in India



Source : DGH



Sedimentary basins in India

Type of basins	Sq.km	Prospectivity	Basins
Category 1	518500	Commercial Production	Cambay, Assam Shelf, Mumbai Offshore, KG, Cauvery, Assam Arakan, Rajasthan
Category 2	164000	Known accumulation but no hydrocarbon	Kutch, Mahanadi-NEC & Andaman-Nicobar
Category 3	641000	Indicated hydrocarbon based on geological prospectivity	Himalayan Foreland, Ganga, Vindhyan, Saurashtra, Kerala-Konkan-Lakshadweep & Bengal
Category 4	461200	Uncertain potential	Karewa, Spiti-Zanskar, Satpura-South Rewa-Damodar, Narmada, Decan Syneclyse, Bhima-Kaladgi, Cuddapah, Pranhita-Godavari, Bastar, Chhattisgarh

Source : DGH



Seismic Survey in India

As per DGH annual report 2015, oil companies have carried out 1,330,592 Line Kilometers (LKM) of 2D seismic survey, 409,909 Sq. Km of 3D seismic survey and drilled 6,959 Exploratory wells since inception as on 31.03.2015 in India.

Operators	2D Seismic (LKM)	3D Seismic (SQ.KM)	No of wells
Oil PSUs	1160152	281482	6384
Private Cos	107231	106718	326
Foreign Cos	63209	21709	249
Total	1330592	409909	6959

Source : DGH



Survey carried out by DGH

Summary of Seismic Survey studies carried out by DGH

Area	Survey Type	Area	Achievement	Year	Service Provider
Andaman Infill	2D Seismic	Offshore	1485 LKM	1999	Western Geophysical, USA
Southern Tip (ST)	2D Seismic	Offshore	2836 LKM	2001-02	Large, Russia
East Coast (EC)	2D Seismic	Offshore	4319 LKM	2001-02	Large, Russia
Andaman-Nicobar (AN)	2D Seismic	Offshore	4307 LKM	2001-02	Large, Russia
West Coast (WC)	2D Seismic	Offshore	12000 LKM	2002-03	Large, Russia
Ganga Valley (GV)	2D Seismic	Onland	1135 LKM	2002-03	Alpha Geo, India
Chambal Valley	2D Seismic	Onland	805 GLK	2003-04	Alpha Geo, India
Kutch	2D Seismic	Onland	691 GLK	2006-09	NGRI, Hyderabad
Kutch	2D Seismic	Onland	691 GLK	2010-12	GEOPIC,ONGC

Source : DGH



DGH focusing on Onland Survey

- ❑ Historically , Directorate General of Hydrocarbons(DGH) had been focusing on offshore seismic survey, with an annual spend of Rs. 20 bn +
- ❑ However, a fresh assessment has been steered by DGH in India through ONGC, for seismic data acquisition in unappraised onland areas of c. 48000 kms
- ❑ All the onshore areas shall be covered by 2D Seismic Survey within a time span of 5 years for a total contract value of more than Rs.30 billion
- ❑ DGH has also approved the Data policy and agreement to carry out Multi-client non-exclusive survey activities relating to hydrocarbon in Offshore and/or Onland part of India



Company Overview





Company Profile

- ❑ Core Services includes:
 - ❑ Designing and preplanning of 2D/3D/3C surveys
 - ❑ Seismic data acquisition in 2D/3D/3C
 - ❑ Seismic data processing of 2D/3D data
 - ❑ Seismic data interpretation

- ❑ Acquired over 15000 LKM, Processed over 31000 LKM and Interpreted over 15000 LKM of 2D seismic data

- ❑ Acquired over 5000 SQ. KM of 3D seismic data in last 5 years

- ❑ 49 completed projects in 3 countries, 14 states and with 32 customers

- ❑ The company presently has 6 crews and a channel count in excess of 15000

- ❑ Multi-terrain capability across North-east, Western and Southern India



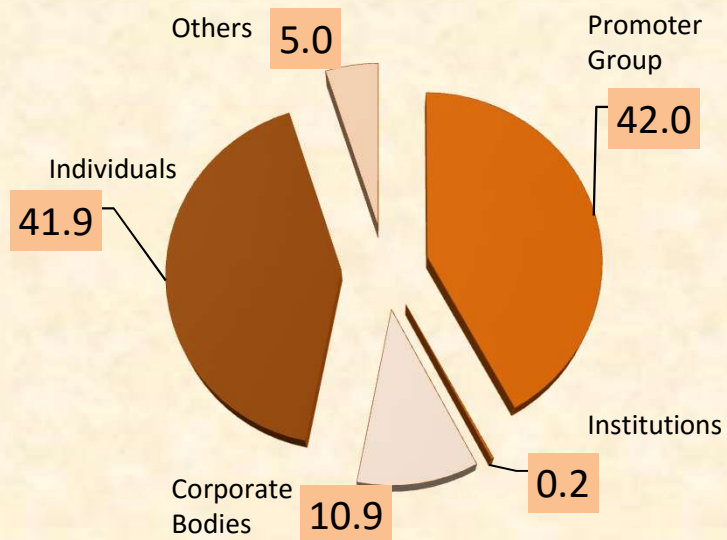
Company Profile

- Headquartered in Hyderabad, India
- Incorporated in 1987, Public issue in 1994
- Engaged in onland seismic data acquisition, processing and interpretation for the last couple of decades

Organization Structure



Shareholding Pattern

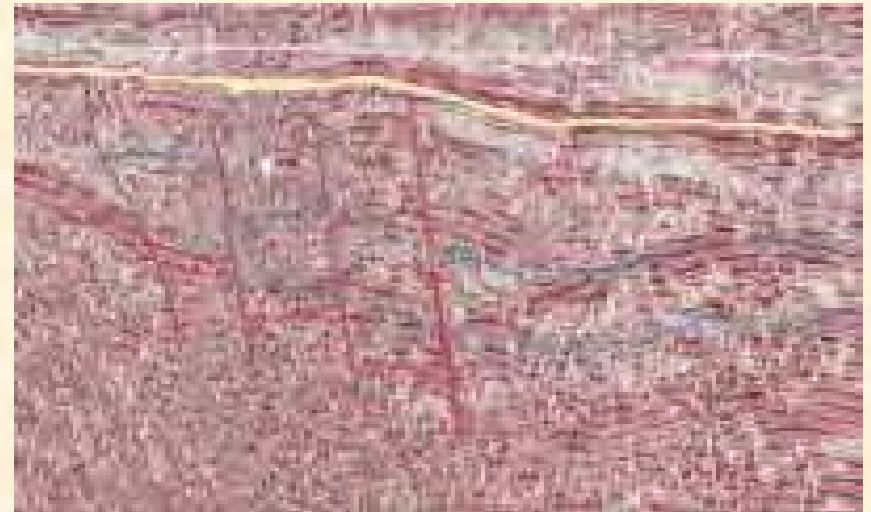
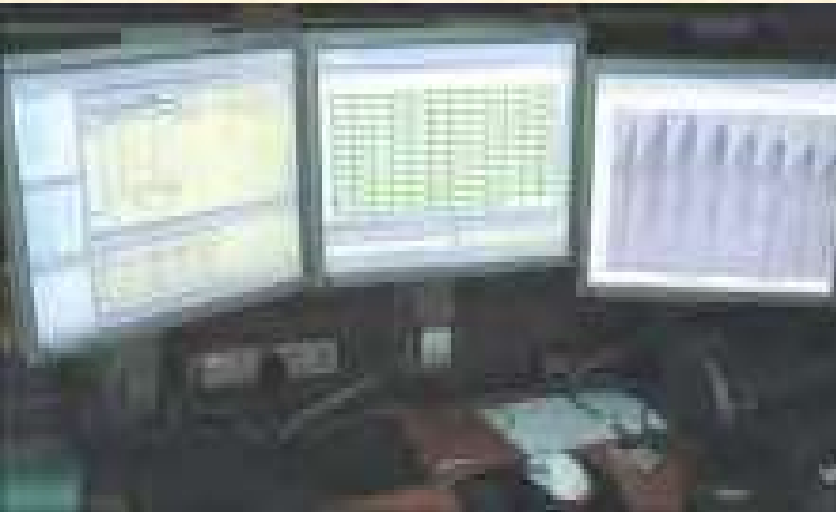


Financials (Rs. Cr)

Particulars	FY12	FY13	FY14	FY15	FY16
Revenues	44	24	94	73	90
EBITDA	5	(2)	37	26	28
Margin (%)	12%	-8%	39%	36%	31%
PAT	-5	-11	28	15	12
Net Worth	49	41	69	84	106
Borrowing	3	5	4	1	2



Company Profile





Milestones

1987

- Incorporation of company

1990

- Emerged as first player to commence seismic operations in India

1991

- First Indian Company to offer onsite processing leading to enhanced quality control

1994

- Acquisition of two state of the art 24 bit telemetry system ION System Two units

1997

- Only Indian geophysical seismic survey company

2006

- Acquired two state-of-the-art 24-bit delta sigma technology Input/Output System 4 units for 3D seismic surveys

2007

- Acquired an additional Input/Output SCORPION recording systems for 3D surveys. More than doubled revenues with increasing returns from 3D services.

2008

- Increased installed capacity by increasing channel count from 7500 to 10000 in Dec 2007. Top line grew by 50.25% due to concurrent management of multi-locational crews



Milestones

2009

- Increase of channel count to 12500

2010

- First international contract in Republic of Georgia using Vibes & Explosives

2010

- Acquisition of AHV IV 62000 lbs Vibrators

2012

- Contract in Myanmar with Petronas

2013

- Acquisition of two Sercel 428 XL systems with 7000 channels

2015

- Largest 3D seismic survey order from ONGC of Rs. 242 Cr

2015

- 2D seismic survey order from Oil India of Rs. 102 Cr

2016

- Largest 2D seismic survey order from ONGC of Rs. 1482 Cr



Key Management

Mr. Z. P. Marshall - Chairperson and Independent Director on the Board of the Company. He is a Graduate in Engineering from Madras Institute of Technology. Held senior positions during his long career at DRDO and BDL, spanning 30 years.

Mr. Dinesh Alla- Promoter Director and Managing Director of the Company. He is a post graduate from BITS, Pilani and has very rich experience and deep knowledge about seismic survey industry

Ms. Savita Alla - Joint Managing Director of the Company. She is a post graduate in Management studies from BITS, Pilani. She served in various Managerial positions in corporate sector

Mr. Rajesh Alla -Promoter Directors of the Company. He is a post graduate engineer from Carnegie Mellon University, Pittsburgh, USA . He has specialized in Image Processing, Computer Vision and Robotics.

Mr. S. Ravula Reddy - Promoter Director of the Company and is on the Board since the inception of the Company. He is Post Graduate in Geophysics and is the Chief Geophysicist and President of Alphageo Inc.



Clientele





Key Projects Executed

Client	Project	Year
Rajasthan Basin		
Oil India Limited	2D API	2004
Ganga Basin		
Oil India Limited	2D A	1999
DGH	2D API	1998
DGH	2D API	2002
Oil India Limited	2D A	2003
Vindhyan Basin		
DGH	2D API	1997
Offshore Kutch		
Tullow India Operation Limited	2D P	2000
Assam Basin		
Canora Resources Limited	2D A	2004
Oil India Limited	2D A	2004
Canoro Resources Limited	2D A	2005
HOEC Limited	2D A	2006
Canoro Resources Limited	3D A	2006
ONGC Limited	2D A	2008
Oil India Limited(PGS)	3D A	2008
Geopetrol International Inc	3D A	2008
HOEC Limited	3D A	2009
Essar Oil Limited	2D A	2010
NaftagaAdani	3D A	2010
Arunachal Basin		
GeoEnpro Petroleum Limited	2D API	2001
Geopetrol International Inc	2D AP	2006
Geopetrol International Inc	2D AP	2006



Key Projects Executed

Client	Project	Year
Onshore Gujrat		
GSPC Limited	2D P	2001
Essar Oil Limited	3D A	2008
Naftogaz-Adani	2D A	2008
Naftogaz Adani	3D A	2008
Interlink Petroleum Limited	3D A	2009
Selan Exploration Technology Limited	3D A	2010
Cauvery Basin		
ONGC Limited	3D A	2008
ONGC Limited	3D A	2009
Godavari basin		
KEI-RSOS Petroleum and Energy Private Limited	3D AP	2011
Onshore Gujrat		
Mercator Petroleum Limited	2D AP	2012
Mercator Limited	3D AP	2012
NTPC Limited	3D A	2012
Bharat Petroresources Limited	2D & 3D A	2014
Gail (India) Limited	2D & 3D A	2014
Omkar Natural Resources Private Limited	2D & 3D AP	2014
Mizoram		
Oil India Limited	3D A	2014
International Projects		
Jindal Petroleum Operating Company LLC Republic of Georgia	2D A	2011
Petronas Carigali Myanmar Inc, Republic of Myanmar	2D A	2013
Istech energy Ep-5 Pte.Ltd Republic of Myanmar	2D A	2014

Source: Company data:

A : Acquisition, P : Processing, I : Interpretation



Experience in difficult terrains

Forested and hilly areas of Kharsang and Jairampur in Arunachal Pradesh-

Completed 102 Sq Kms of 3D data acquisition in thickly forested and hilly areas (elevation varying from 150 to 1000m)

Rugged, steep hilly terrain with forested cover in Mizoram, India:

First company to complete seismic survey campaign in hilly and inaccessible terrain in Mizoram for ONGC using explosives as energy source. This area had thick vegetation and acute shortage of water

Cauvery Basin – Tamil nadu 3D-

Executed two 3D Data Acquisition Project of 700 sq.km and 800 sq.km for ONGC in Cauvery basin. These projects involved imaging across a large lake and a large river

Republic of Myanmar-

2D seismic data acquisition of 1460 LKM using both Vibroseis and Explosives. The terrain was a mix of flat agricultural lands, undulating steep and hilly terrains



Experience in difficult terrains





Crews with unmatched expertise

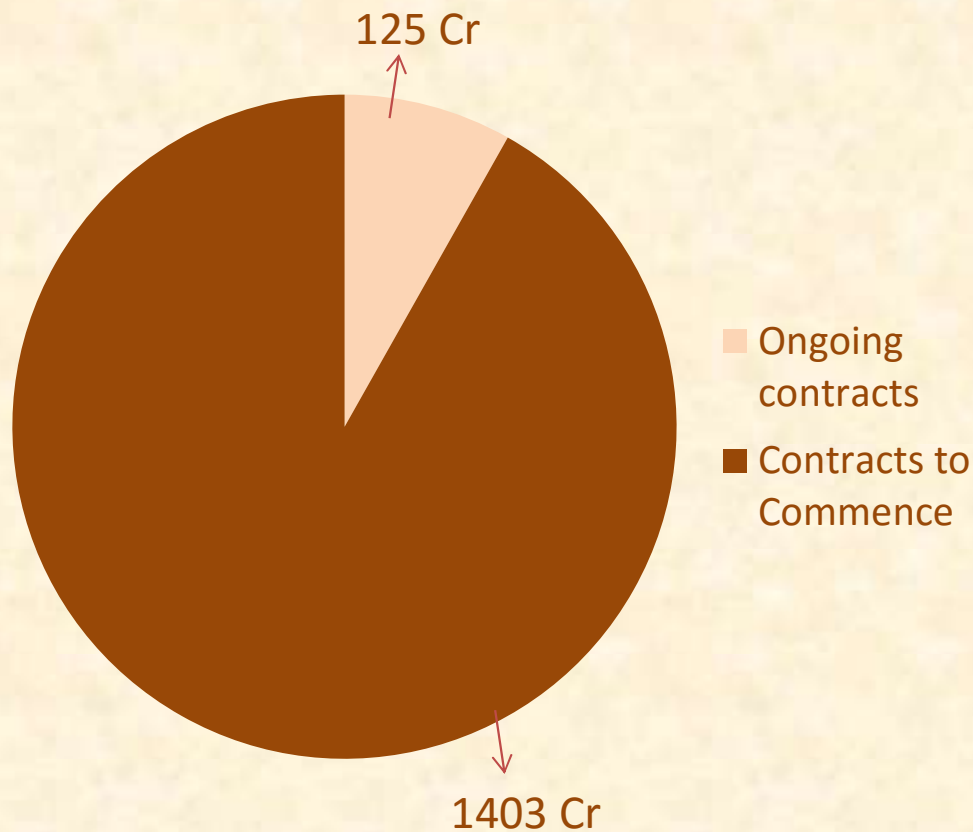
- ❑ Over 1000 man-years of rich cumulative experience in challenging basins & terrains across India & overseas
- ❑ Multinational crew, drawn from countries such as India, US, Canada, Nigeria, Russia and Columbia comprises professionals who are experts in the field of geology & geophysics and unmatched expertise in reservoir & survey
- ❑ Geared to operate 6 crews simultaneously at different project locations





Strong order book

Order book of Rs. 1528 Cr



Ongoing orders

- ❑ Rs. 242 Cr order from ONGC for 3D Seismic Data Acquisition in KG Basin
- ❑ 3D Land Seismic Data Acquisition in KG basin for Rs. 21 Cr

Contracts to commence

- ❑ Rs. 102 Cr order from Oil India for provision of 2D seismic Acquisition Services
- ❑ Rs. 1482 Cr order from ONGC for 2D seismic data in un-appraised on land areas



Key Order Details

**Rs. 1482 Cr
order from
ONGC**

- Acquisition of 2D Seismic Data in un-appraised on land areas of Indian Sedimentary Basins of India as a part of the National Seismic Program by March 2019
- The execution of the contract involves addition of 10 seismic crews to work in various sectors of India covering the states of Karnataka, Maharashtra, Gujarat, Rajasthan, MP, Uttarakhand, Himachal Pradesh, and Kashmir to acquire an estimated 26905 LKM of 2D seismic data

**Rs. 102 Cr
order from
Oil India**

- Provision of 2D seismic Acquisition services in the areas covering parts of Assam & Arunachal Pradesh for an estimated contract value of Rs. 102 Cr, under National Seismic Program to be executed by November 2018

**Rs. 242 Cr
order from
ONGC**

- Executing contract from ONGC for 3D Seismic Data Acquisition in the area of KG basin for an estimated contract value of Rs. 242 Cr, to be executed by 30th 2017
- Largest 3D volume of on-land seismic data acquisition work undertaken by ONGC



Promising Outlook





Potential business drivers

Further orders from National Seismic Program (NSP)

- The current requirement of data acquisition under NSP is about 50,000 LKM.
- Out of this contracts have been awarded for approx. 42,000 LKM. Against this ALPHAGEO has been awarded approx. 30,000 LKM.
- Potential tenders from balance work in the North East approx. 1000 crores

Post NSP Scenario

- All data acquired under NSP will be put in data room for allowing companies to participate in Exploration Activity under the Open Acreage Licensing Policy (OALP). Participation from global players is expected
- Further orders for 2D seismic surveys with closer grids in the prospective areas by companies taking up work under OALP. Alphageo is the most likely candidate for data acquisition services in these fields
- The prospective areas could potentially upgrade for 3D seismic survey

Marginal Fields and CBM fields

- The marginal fields which were written off by ONGC, and Oil India due to unviable economics will be re-explored, opening up possibility of 3D surveys in these areas for Alphageo
- Currently Government has called for bids for 69 fields (due in October 2016) out of a list of potential 200+ fields
- Potential CBM fields also carve out new opportunities



Potential business drivers

Government thrust to enhance Production – CARPET 3D SURVEYS

- The current Government is actively pursuing the policy of implementing enhanced production by the 2 National Oil Companies.
- ONGC KG Basin has taken up the pilot project of CARPET 3D to better understand basin reservoir characteristics. This is being executed by ALPHAGEO (RS. 242 Cr order).
- Potential tenders from balance regions Gujarat, Assam, Tripura etc to come up

Prospects overseas and offshore

- Prominent onland seismic service provider in Myanmar. Exploring further in Myanmar as well as other Asian geographies
- Exploring offshore opportunities through alliances

Potentially sole beneficiary due to negligible competition

- Alphageo has been an active domestic player in last five years performing onland 2D&3D seismic surveys
- Overseas service providers have been focusing primarily on offshore, since onshore survey requires understanding of terrains, habitat and consequent regulatory implications
- Alphageo has a strong history of surveying difficult onland terrains, adhering to HSE standards (Health, Safety, and Environmental) with minimum regulatory hindrances as mentioned in Slide 20-21
- Only couple of domestic competitors still operating



Financials





Consolidated Financials – Profit & Loss

Paticulars (Rs. Crs)	FY12	FY13	FY14	FY15	FY16
Total revenue from Operation	43.9	23.6	94.3	72.7	89.6
EXPENSES					
Survey and survey related expenses	30.1	16.3	47.0	37.5	51.8
Employee benefits expense	5.4	4.2	4.3	5.3	6.1
Other Expense	3.3	5.0	6.3	4.0	3.9
Total Expense	38.8	25.6	57.6	46.8	61.8
EBITDA	5.1	-2.0	36.6	25.9	27.8
Margin (%)	12%	-8%	39%	36%	31%
Depreciation	11.4	7.7	8.8	10.7	12.3
EBIT	-6.3	-9.7	27.8	15.2	15.5
Other Income	2.1	0.2	1.3	0.7	0.9
Interest Cost	0.5	0.5	0.7	0.8	0.7
PBT	-4.8	-9.9	28.4	15.1	15.6
Tax	0.3	0.8	1.9	0.6	4.0
PAT	-5.1	-10.7	26.5	14.5	11.6



Consolidated Financials – Balance sheet

Particulars (Rs.in Crs)	FY12	FY13	FY14	FY15	FY16
Share Capital	5.1	5.4	5.6	5.6	5.6
Reserves & Surplus	43.9	35.3	63.4	78.2	90.8
Share Warrants	0.0	0.4	0.0	0.0	9.4
Long term Liabilities	0.0	0.2	0.9	0.4	2.7
Current liabilities	16.7	32.6	37.2	7.4	47.8
Total	65.8	73.9	107.2	91.6	156.3
Fixed Assets	37.3	33.2	64.0	54.2	78.5
WIP	1.7	14.8	1.0	1.0	0.0
Other Non Current Assets	7.1	10.8	8.1	10.2	11.9
Current assets	19.7	15.1	34.1	26.2	65.9
Total	65.8	73.9	107.2	91.6	156.3



Q1FY17 Performance

Particulars (Rs. Cr)	Q1FY17	Q4FY16	Q1FY16
Total Income from Operation (Net)	52.2	70.9	4.7
Expenses	0.0	0.0	0.0
Survey and Survey Related Expense	32.1	40.1	3.6
Purchase stock in trade	0.0	0.0	0.0
Employee Benefits Expense	2.4	1.8	1.4
Depreciation & Amortisation expense	3.9	3.9	2.7
Other Expenses	2.4	1.2	0.7
Total Expenses	40.9	46.9	8.4
EBIT	11.3	23.9	-3.7
Other Income	0.3	0.1	0.3
Finance Cost	0.7	0.3	0.0
EBT	10.9	23.8	-3.4
Tax Expense	3.0	4.6	-0.3
PAT	7.9	19.2	-3.1



Thank You

