

# **RELIANCE INDUSTRIES LIMITED**

Petroleum Business (E&P)
Notice Inviting Expression of Interest
(RIL/E&P/EOI/2019/01)
(Under International Competitive Bidding)

## A) For All Blocks

Reliance Industries Limited (RIL), as operator, on behalf of itself & its co-venturers invites Expression of Interest (EOI) from reputed and experienced Contractors for following categories, for the blocks acquired under NELP-I:

CATEGORY NO	CATEGORY DESCRIPTION	
DRL/COMN/2019/1	All Services, Equipment and Materials for Exploratory & Development Drilling,	
DRE/COMIN/2019/1	Completion, Workover & Intervention	
GAG/COMN/2019/2	Geophysical and Seismic Services	
DEV/COMN/2019/3	Geo-Technical Investigation for Offshore Field Development	
DEV/COMN/2019/4	Geo-Physical Surveys for Offshore Field Development	
DEV/COMN/2019/5	Geo-Hazard Studies for Offshore Field Development	

# B) For Block No. KG-DWN-98/3 (KG-D6)

Reliance Industries Limited (RIL), as operator, on behalf of itself & its co-venturers invites Expression of Interest (EOI) from reputed and experienced Contractors for following categories, for Deep-water Block No. KG-DWN-98/3 (KG D6) in East coast of India:

CATEGORY NO	CATEGORY DESCRIPTION		
DEV/KGD6/2019/1	FEED Competition for Additional MEG Reclamation Facilities		
DEV/KGD6/2019/2	Design, Engineering, Supply, Construction / Installation Supervision, Precommissioning and Commissioning of Additional MEG Reclamation Facilities		
DEV/KGD6/2019/3	Detailed Engineering Consultancy Services for provision of Utilities and Integration of Additional MEG Reclamation Facilities		
DEV/KGD6/2019/4	Construction and Installation Services for Additional MEG Reclamation Facilities, Utilities and associated Civil and Piling works		
DEV/KGD6/2019/5	Miscellaneous Services for Provision of Additional MEG Reclamation Facilities and utilities		
DEV/KGD6/2019/6	Supply of Equipment, Materials and bulks for provision of Additional MEG Reclamation Facilities and utilities		
OAM/KGD6/2019/7	Hiring of Multi Support Vessel for Sub-Sea Intervention		
OAM/KGD6/2019/8	Painting of Fixed Offshore Platform		

Interested Contractors/Vendors are requested to visit our website <a href="www.ril.com">www.ril.com</a> for further details on the above and submit their Expression of Interest (hard copies in duplicate along with electronic copy on CD/DVD) with all details through courier / post and also through e-mail on <a href="deveoiresponse.eandp@ril.com">deveoiresponse.eandp@ril.com</a>, on or before 18th February 2019. The envelope should be superscribed as RIL/E&P/EOI/2019/01 along with category number.

# **Address for Communication:**

Chief - Supply Chain Management,
Reliance Industries Limited, Petroleum Business (E&P),
Building No 11, 'A' Wing, Second Floor, Reliance Corporate Park (RCP),
Thane-Belapur Road, Ghansoli, Navi Mumbai-400701, India
Email Address: - deveoiresponse.eandp@ril.com

CIN: L17110MH1973PLC019786

## Further details on the above requirements are as below:

### A) For All Oil & Gas Fields

Reliance Industries Limited (RIL), as operator, on behalf of itself & its co-venturers invites Expression of Interest (EOI) from reputed and experienced Contractors for following categories, for the blocks acquired under NELP-I:

CATEGORY NO	CATEGORY DESCRIPTION
DRL/COMN/2019/1	All Services, Equipment and Materials for Exploratory & Development Drilling, Completion, Workover & Intervention
GAG/COMN/2019/2	Geophysical and Seismic Services
DEV/COMN/2019/3	Geo-Technical Investigation for Offshore Field Development
DEV/COMN/2019/4	Geo-Physical Surveys for Offshore Field Development
DEV/COMN/2019/5	Geo-Hazard Studies for Offshore Field Development

Contractors interested to pre-qualify for receiving tenders are required to submit the information as detailed below:

# <u>Category No: DRL/COMN/2019/1</u> for All Services, Equipment and Materials for Exploratory & Development Drilling, Completion, Workover & Intervention

#### Scope

Supply of all Equipment, Materials and all services for Exploratory & Development Drilling, Completion, Workover & Intervention.

#### Contractor shall submit:

- Details of contracts executed in preceding five years including client contact details (Please attach
  the details with complete technical information and appropriate certification / documentation).
- Details/ Technical specifications of Equipment/ Resources/ Vessels directly owned and details of competent technical personnel/ organization chart.
- Company profile and audited financial results (balance sheet) for last five years.
- Details of present work commitments and anticipated workload.
- Brief on Health, Safety, Environment and Quality Assurance systems followed along with track record for last three years and any relevant certification.
- Any other relevant information that will establish that Contractor is a competent equipment/material/service provider.

> Contractors are requested to respond to one or more of following sub-categories:

	Contractors are requested to respond to one or more of following sub-categories:		
DAC/COMN/2019/1		on of Service/ Supply	Reference No.
All Services, Equipment		New Generation Floaters (Drill ships / Semi)	DAC/COMN/2019/1.1
and Materials for		Orilling & Fluid Engineering & Maintenance -	DAC/COMN/2019/1.2
Exploratory &		VBM / SBM / OBM including supply of Drilling	
Development Drilling,		Fluid Materials & Additives	- 1 0 / 0 0 1 1 1 / 0 1 1 / 1 0 1 1 1 1 1
Completion, Workover &		Electro logging Services	DAC/COMN/2019/1.3
Intervention		Solid control equipment & services (Including	DAC/COMN/2019/1.4
		Filtration)	DA 0/00NAN/0040/4 5
		Provision of Cementing & associated pumping	DAC/COMN/2019/1.5
		services, Down-hole Tools, services and supply of Cementing Equipment, Chemicals,	
		Additives and Casing hardware	
		Orilling Tools/ Fishing / Milling / Abandonment	DAC/COMN/2019/1.6
		Formation Evaluation & Coring	DAC/COMN/2019/1.7
		Down-hole motors, Rotary Steerable System,	DAC/COMN/2019/1.7
		Directional Drilling & MWD / LWD Services.	B/(6/66)/// (7/20)/// (7/20)
		Casing / Tubing running equipment and	DAC/COMN/2019/1.9
		services.	27.07.00
		Coil tubing, Nitrogen & Stimulation services.	DAC/COMN/2019/1.10
		Slick-line service.	DAC/COMN/2019/1.11
		liring of PSVs / AHTS with DP capabilities	DAC/COMN/2019/1.12
	13. F	Hiring of Security / Patrol Boats.	DAC/COMN/2019/1.13
	14. C	Operation & Maintenance of Helicopter	DAC/COMN/2019/1.14
		Rig positioning, Current measurements & Site	DAC/COMN/2019/1.15
		Surveys.	
		ROV Services.	DAC/COMN/2019/1.16
		Supply of Casings, Pup Joints, Crossovers &	DAC/COMN/2019/1.17
		Accessories	DAG(00NN)/0040/4 40
		Supply of Tubings, Pup Joints, Crossovers &	DAC/COMN/2019/1.18
		Accessories Hole Enlargement Services	DAC/COMN/2019/1.19
		Liner Hangers Supply & Services	DAC/COMN/2019/1.19 DAC/COMN/2019/1.20
		Supply of Drill Bits (Roller / PDC / Diamond) /	DAC/COMN/2019/1.20
		Hole Openers / Reamers / Stabilizers	DA0/00/01/0/2013/1.21
		Annular Pressure Monitoring, Managing &	DAC/COMN/2019/1.22
		Mitigation for Deepwater projects	
		Supply of API Class 'G' Oil Well Cement	DAC/COMN/2019/1.23
		Mudline Suspension systems	DAC/COMN/2019/1.24
		Near balance Drilling Services	DAC/COMN/2019/1.25
		Operation, House-keeping, Maintenance and	DAC/COMN/2019/1.26
		Management of Supply base facilities and	
		nfrastructure	DAG/00NAL/0040/4 07
	_	CHA services	DAC/COMN/2019/1.27
		Freight forwarding services	DAC/COMN/2019/1.28
		ransportation Services Hiring of P&M for shore base	DAC/COMN/2019/1.29 DAC/COMN/2019/1.30
		Fuel Supply (HSD, HF-HSD, LDO, ATF, Bio	DAC/COMN/2019/1.30 DAC/COMN/2019/1.31
		Diesel) for Vessels, Rigs & Helicopters	D, (O, O O WII V/ 20 1 3/ 1 . 3 1
		Supply of Mudmats	DAC/COMN/2019/1.32
		OKD / MOTF Services	DAC/COMN/2019/1.33
		Sand Control Equipment & Services	DAC/COMN/2019/1.34
		Vellbore Surveys	DAC/COMN/2019/1.35
		Veather forecasting Services	DAC/COMN/2019/1.36
	37. N	Mud logging Services	DAC/COMN/2019/1.37
		12S Services	DAC/COMN/2019/1.38
		OST Equipment & Services	DAC/COMN/2019/1.39
		PVT analysis, Well Fluid Sampling & Analysis	DAC/COMN/2019/1.40
		Rig positioning QC services	DAC/COMN/2019/1.41
		Diving services	DAC/COMN/2019/1.42
		Communication Equipment	DAC/COMN/2019/1.43
		Any Specialized Services for HP/HT wells	DAC/COMN/2019/1.44
		Services of High Pressure pumps/ Kill pumps Disposal of Hazardous and/or Dangerous	DAC/COMN/2019/1.45
		pods (incl. drilling waste)	DAC/COMN/2019/1.46
	/7 C	Services of Mud Cooler	DAC/COMN/2019/1.47
	71. 3	JOI VIOUS OF IVIDA COULD	DAG CONTINIZOTO LAT

DAC/COMN/2019/1	Description of Service/ Supply	Reference No.
	48. Supply of MEG	DAC/COMN/2019/1.48
	<ol> <li>A) Agencies providing Expat &amp; Ind personnel for position of drilling supervisor well completion engineer, Subsea supervisor</li> </ol>	ors,
	Completion Supervisor, Well Test Supervisor, RIG positioning QC services, well seedledges, consultancy services and any ot	sor, site her
	category of personnel required in E Business.	
	49 B) Agencies providing Indian personnel plant supervision, operation, Assistant for jobs, assistance for operation of shore be and warehouses, assistance in fac management, Technicians, LAQ field office Radio operator, SAP professionals, AutoC	TT ase ility cer, AD
	Draughtsman, Document controller and a other categories required for operation of E business	
	50. Turbo drill services	DAC/COMN/2019/1.50
	<ol> <li>In situ internal casing isolation system</li> <li>Third Party Reservoir/ Reserves/ Sou Evaluation / Assessment of Oil/ Gas Fields</li> </ol>	DAC/COMN/2019/1.51 DAC/COMN/2019/1.52
	53. Geo-mechanical study	DAC/COMN/2019/1.53
	54. Hiring of Helicopter services	DAC/COMN/2019/1.54
	<ul><li>55. Helicopter Safety &amp; Maintenance Audit</li><li>56. Drilling Optimization Consulting (Drilling Limit)</li></ul>	DAC/COMN/2019/1.55 DAC/COMN/2019/1.56
	57. Mooring Analysis and Equipment	DAC/COMN/2019/1.57
	58. Vessel safety and condition Audit	DAC/COMN/2019/1.58
	59. Oil Spill response Services	DAC/COMN/2019/1.59
	<ul><li>60. Well Control Services</li><li>61. Supply of Subsea Wellheads and runn tools</li></ul>	DAC/COMN/2019/1.60 DAC/COMN/2019/1.61
	<ul><li>62. Supply of Mud tanks</li><li>63. Supply and fabrication of Equipment requifor base operation.</li></ul>	red DAC/COMN/2019/1.62 DAC/COMN/2019/1.63
	<ol> <li>Supply of cargo baskets, lifting shackles, st pallets, cargo containers, etc.</li> </ol>	teel DAC/COMN/2019/1.64
	<ul><li>65. Supply of Mobile Silos</li><li>66. Supply of solid expandable tubular &amp; runn Services</li></ul>	
	67. Supply of Safety Equipment	DAC/COMN/2019/1.67
	68. Supply of H2S Detection system	DAC/COMN/2019/1.68
	<ol> <li>Supply of Bulk handling plant.</li> <li>NDT/Inspection services (incl. MPI &amp; Load t services)</li> </ol>	
	71. Hospitality Services	DAC/COMN/2019/1.71
	<ul><li>72. Marine environmental hind casting studies</li><li>73. Core Analysis &amp; Formation Damage Studies</li><li>74. Laboratory Analysis :</li></ul>	DAC/COMN/2019/1.72 DAC/COMN/2019/1.73
	<ul><li>a. Geochemical Analysis</li><li>b. Micro CT Scan</li></ul>	DAC/COMN/2019/1.74A DAC/COMN/2019/1.74B
	c. Biostratigraphy & Palaeontological Service     d. Sedimentology & Core Analysis Evaluation	ces DAC/COMN/2019/1.74C
	e. Special Studies 75. Environment rapid risk assessment services	DAC/COMN/2019/1.74E
	<ul><li>75. Environment rapid risk assessment services</li><li>76. Vessel Tank cleaning services</li></ul>	DAC/COMN/2019/1.75 DAC/COMN/2019/1.76
	77. Cutting Dryer System	DAC/COMN/2019/1.77
	78. Well Intervention Supply & Services	DAC/COMN/2019/1.78
	<ul><li>79. Toxicity testing of Drilling Mud (LC50)</li><li>80. Pre hire &amp; Periodic Rig Inspection Servic Safety and Condition Audit</li></ul>	DAC/COMN/2019/1.79
	<ul><li>81. Preset Mooring Equipment &amp; Services</li><li>82. Manage Pressure while Drilling (MPD) Serv</li></ul>	
	83. Under balance drilling (UBD) Service	DAC/COMN/2019/1.83

DAC/COMN/2019/1	Description of Service/ Supply	Reference No.
	84. Supply of Cross Link Polymer	DAC/COMN/2019/1.84
	85. Metocean Data Measurement and Real Time Data Measurement	DAC/COMN/2019/1.85
	86. Supply of Completion Equipment and Completion Services	DAC/COMN/2019/1.86
	87. Supply & Services for Drilling & Completion of Multilateral Wells	DAC/COMN/2019/1.87
	88. Hiring of warehouse and premises on rental basis.	DAC/COMN/2019/1.88
	89. Hiring of storage facility for storing explosives near shore-base.	DAC/COMN/2019/1.89
	90. Inspection, Load Testing & Certification of Lifting Tools, Lifting / Hoisting Equipment	DAC/COMN/2019/1.90
	91. Threading, Gauging, Thread Inspection and Preservation of Casing, crossover & pup joints	DAC/COMN/2019/1.91
	92. Operation & Maintenance of Bulk Material Storage & Handling System (such as solids, Liquids, Waste etc.)	DAC/COMN/2019/1.92
	93. Operation & Maintenance of Material Handling Equipment	DAC/COMN/2019/1.93
	94. Supply of Potable / Drilling Water	DAC/COMN/2019/1.94
	95. IT Hardware including Laptops, Desktop, Servers, Printers, Plotters, Workstations, , IT	DAC/COMN/2019/1.95
	accessories & spares	
	96. IT Storage Systems	DAC/COMN/2019/1.96
	97. IT Manpower service including services for FMS Engineers, Data Administrator, System Administrator, Net Backup Administrator and other related services.	DAC/COMN/2019/1.97
	98. Reservoir Monitoring System & Services	DAC/COMN/2019/1.98
	99. Sub Surface Safety Valves and Services	DAC/COMN/2019/1.99
	100.Supply of Down-hole Pressure and Temperature Monitoring System and Services	DAC/COMN/2019/1.100
	101.Gravel Pumping Services	DAC/COMN/2019/1.101
	102. Supply of Gravel Pack, Chemicals & Products.	DAC/COMN/2019/1.102
	103.Well Bore Clean-up Services	DAC/COMN/2019/1.103
	104. Tractor Operated Well Intervention Services	DAC/COMN/2019/1.104
	105.Well Suspension Services	DAC/COMN/2019/1.105
	106.Gravel Pack Evaluation Services	DAC/COMN/2019/1.106
	107. Special tools and services for Workover and Intervention	DAC/COMN/2019/1.107
	108.Engineering services – Riser analysis, Conductor analysis etc.	DAC/COMN/2019/1.108
	109.Engineering services for Drilling design and review.	DAC/COMN/2019/1.109
	110.Engineering services for Completion design and review	DAC/COMN/2019/1.110
	111.Engineering services for ERD (Extended reach) wells	DAC/COMN/2019/1.111
	112.Specialised tools for ERD (Extended reach) wells	DAC/COMN/2019/1.112
	113. Specialty chemicals for drilling, completion, workover & intervention	DAC/COMN/2019/1.113
	114.Subsea Completion Riser / Landing String. 115.Supply and Services for Completion softwares	DAC/COMN/2019/1.114 DAC/COMN/2019/1.115
	116.Supply and Services for Drilling softwares	DAC/COMN/2019/1.116
	117.Services for Downhole camera 118.Supply and Services for Retrievable	DAC/COMN/2019/1.117 DAC/COMN/2019/1.118
	Bridge Plug 119.Supply and services for open hole zonal	DAC/COMN/2019/1.119
	isolation system 120.Other Services which are not included above but required for drilling and completion,	DAC/COMN/2019/1.120
	workover and intervention jobs.	

DAC/COMN/2019/1	Description of Service/ Supply	Reference No.
	121.Provision of Well Examination services	DAC/COMN/2019/1.121
	122.Provision of Third party Inspection services	DAC/COMN/2019/1.122

## Category No: GAG/COMN/2019/2 for Geophysical and Seismic Services

#### Scope

Provide geophysical and seismic services for marine/land/air applications.

### Contractor shall submit

- Details of contracts executed in preceding five years including client contact details, Project Title, Quantum of Work, Year of Project, Project Duration (From-To), Project Cost, Project work Centre (Please attach the details with complete technical information and appropriate certification / documentation).
- Details of Equipment/ Resources directly owned and details of key technical personnel (Name of Key/ technical Expert, Designation, Qualifications, Years of Experience, No of Projects worked on) apart from CV of each expert and organization chart.
- The details of software, wherever applicable that will be used for undertaking the work.
- The technology brochure / information along with elaborate explanation.
- Company profile and audited financial results (balance sheet) for last five years.
- Details of present work commitments and anticipated workload.
- Brief on Health, Safety, Environment and Quality Assurance systems followed along with track record for last three years and any relevant certification.
- Any other relevant information that will establish that Contractor is a competent equipment/material/service provider.

## Contractors are requested to respond to one or more of following sub-categories:

GAG/COMN/2019/2	Description of Services	Reference No.
Geophysical &	Marine	
Seismic Services	1. 2D/3D/4D Seismic Data Acquisition including all advance technology on offer with / without Onboard Broadband Processing.	GAG/COMN/2019/2.1
	2. 2D/3D/4D Seismic Data Onshore Processing including all advance technology on offer / Time and Depth Processing / Velocity Modeling / Depth conversion/ Advanced/ Special Processing/ AVO / Inversion / Rock Physics Modeling.	GAG/COMN/2019/2.2
	3. 2D/3D/4D Seismic Survey Designing and illumination studies.	GAG/COMN/2019/2.3
	4. Shipborne Gravity / Magnetic / Gradiometry Surveys with / without 2D / 3D Seismic Surveys.	GAG/COMN/2019/2.4
	5. Controlled Source Electromagnetic (Sea Bed Logging) Surveys, Processing & Interpretation.	GAG/COMN/2019/2.5
	6. Marine Magneto Telluric Surveys, Processing & Interpretation	GAG/COMN/2019/2.6
	7. Multi Transient Electro Magnetic Surveys, Processing & Interpretation.	GAG/COMN/2019/2.7
	8. OBC Multi Component Seismic Surveys, Processing & Interpretation.	GAG/COMN/2019/2.8
	9. Multibeam / Backscatter / Bathymetry / Predrill / Geo Hazard / 2D Hi- Res & other Surveys.	GAG/COMN/2019/2.9
	10. Quantitative / Integrated Interpretation Services.	GAG/COMN/2019/2.10
	Land	
	11. 2D/3D/4D Seismic Data Acquisition with all advance technology on offer including Multi component survey.	GAG/COMN/2019/2.11
	12. 2D/3D/4D Seismic Data Onshore Processing with all advance technology on offer / Time and Depth Processing / Velocity Modeling / Depth conversion/ Advanced/ Special Processing/ AVO / Inversion / Rock Physics Modeling.	GAG/COMN/2019/2.12
	13. 2D/3D/4D Seismic Survey Designing.	GAG/COMN/2019/2.13
	14. Gravity / Magnetic / Gradiometry Surveys.	GAG/COMN/2019/2.14
	15. Multi Transient Electromagnetic Surveys.	GAG/COMN/2019/2.15
	16. Quantitative / Integrated Interpretation Services.	GAG/COMN/2019/2.16
	Air	

17. Airborne Gravity / Magnetic / Gradiometry & other Surveys.	GAG/COMN/2019/2.17
Others	
18. Operational Seismic and Log Data Archival / transcription / tape copying.	GAG/COMN/2019/2.18
19. Large scale bit to bit Seismic & Log data transmission & copying using Industry Standard QC tools & Procedures.	GAG/COMN/2019/2.19
20. Provision of supply of QA / QC personnel for marine and land surveys for seismic, electromagnetic, multibeam etc.	GAG/COMN/2019/2.20
21. Provision of supply of QA / QC personnel / consultancy for Processing integrated interpretation etc. with details of QC technology and products.	GAG/COMN/2019/2.21
22. Establishing a corporate data store for petroleum E& P data.	GAG/COMN/2019/2.22
23. Gravity & Magnetic Data Processing & Interpretation for Onshore & Offshore Blocks	GAG/COMN/2019/2.23
24.Uncertainty Quantification of Geoscientific Interpretation	GAG/COMN/2019/2.24
25. Seismic Facies Classification Services	GAG/COMN/2019/2.25
26.Petro physical Analysis Integrating Core data	GAG/COMN/2019/2.26
27.Rock physical Services	GAG/COMN/2019/2.27
28. Lab studies for side wall cores/well cuttings and field samples etc.	GAG/COMN/2019/2.28
29.Identification of Depositional Environment based on imaged log data	GAG/COMN/2019/2.29
30. Specialized Consultancy Services for Exploration Activities	GAG/COMN/2019/2.30

# Category No: DEV/COMN/2019/3 for Geo-Technical Investigation for Offshore Field Development

# Scope

Carry out Geo-technical investigations for offshore oil and gas projects with capability of performing in seabed mode and drilling mode, perform in situ, offshore and onshore soil testing, interpret and prepare geotechnical engineering reports.

#### Contractor shall submit:

- Details of experience in carrying out geo-technical investigations in shallow water and deep water up to water depth of 2000 m in the last 10 years. Track record shall be submitted separately for shallow water depths and deep water depths.
- List of geo-technical investigation vessels owned/leased along with details of the vessel, in-situ
  testing and offshore soil testing equipment. Contractor shall provide the limitations of vessel and
  equipment, if any.
- List of personnel (Offshore operations, soil testing, interpretation & Report preparation) having experience in similar projects along with CVs.
- Details and location of Onshore soil testing facilities.
- Details of present work commitment and anticipated work load of geo-technical investigation vessels.
- Company profile and audited financial results (Balance Sheet) for last five years.
- Brief on Health, Safety, Environment and Quality Assurance systems followed along with track record for last three years and any relevant certification.
- Any other relevant information that will establish that Contractor is a competent service provider.

# Category No: DEV/COMN/2019/4 for Geo-Physical Surveys for Offshore Field Development.

#### Scope

Carry out Geo-Physical surveys for establishing field layout, pipeline and umbilical routes and current measurements as required for offshore oil and gas projects. Contractor shall be able to interpret data and prepare detailed reports and drawings.

# > Contractor shall submit:

- Details of experience in carrying out geo-physical surveys in shallow water and deep water up to water depth of 2000 m in the last 10 years. Track record shall be submitted separately for shallow water depths and deep water depths.
- List of geo-physical survey vessels owned/leased along with details of the vessel, geo-physical survey equipment for bathymetry, side scan sonar, sub bottom profiler etc. Contractor shall provide the limitations of vessel and equipment, if any.

- List of key personnel (Offshore operations, Offshore Survey, Geo-physics, Data Interpretation and Report preparation) having experience in similar projects along with CVs.
- Details of present work commitment and anticipated work load of geo-physical survey vessels.
- Company profile and audited financial results (Balance Sheet) for last five years
- Brief on Health, Safety, Environment and Quality Assurance systems followed along with track record for last three years and any relevant certification.
- Any other relevant information that will establish that Contractor is a competent service provider.

## Category No: DEV/COMN/2019/5 for Geo-Hazard Studies for Offshore Field Development.

## Scope

Carry out Geo-hazard studies to identify risks and potential geo-hazard areas, perform risk analysis & engineering evaluation and provide recommendations for offshore oil and gas projects.

#### > Contractor shall submit:

- Details of experience in carrying out Geo-hazard studies for Offshore Oil and Gas projects in the last 10 years.
- Expertise in the areas of Geology including sub-surface geology, Geophysical, Geotechnical and Earthquake engineering.
- List of key personnel having experience in similar studies along with CVs.
- List of applicable software available with Contractor.
- Details of present work commitments and anticipated work load.
- Company profile and audited financial results (Balance Sheet) for last five years.
- Brief on Health, Safety, Environment and Quality Assurance systems followed along with track record for last three years and any relevant certification.
- Any other relevant information that will establish that Contractor is a competent service provider.

# For Block No. KG-DWN-98/3 (KG-D6)

Reliance Industries Limited (RIL), as operator, on behalf of itself & its co-venturers invites Expression of Interest (EOI) from reputed and experienced Contractors for following categories, for Deep-water Block No. KG-DWN-98/3 (KG D6) in East coast of India:

CATEGORY NO	CATEGORY DESCRIPTION		
DEV/KGD6/2019/1	FEED Competition for Additional MEG Reclamation Facilities		
DEV/KGD6/2019/2	Design, Engineering, Supply, Construction / Installation Supervision, Precommissioning and Commissioning of Additional MEG Reclamation Facilities		
DEV/KGD6/2019/3	Detailed Engineering Consultancy Services for provision of Utilities and Integration of Additional MEG Reclamation Facilities		
DEV/KGD6/2019/4	Construction and Installation Services for Additional MEG Reclamation Facilities, Utilities and associated Civil and Piling works		
DEV/KGD6/2019/5	Miscellaneous Services for Provision of Additional MEG Reclamation Facilities and utilities		
DEV/KGD6/2019/6	Supply of Equipment, Materials and bulks for provision of Additional MEG Reclamation Facilities and utilities		
OAM/KGD6/2019/7	Hiring of Multi Support Vessel for Sub-Sea Intervention		
OAM/KGD6/2019/8	Painting of Fixed Offshore Platform		

# Category No: DEV/KGD6/2019/1 for FEED Competition for Additional MEG Reclamation Facilities

# Scope

FEED Competition for Additional MEG Reclamation Facilities

#### > Contractor shall submit

- Previous experience of providing Process Knowhow and Front End Engineering Design (FEED)
   Package in the past 10 years for MEG Reclamation systems.
- As a minimum, the following technical details shall be provided for MEG Reclamation Facilities supplied by the Contractor.

- ✓ Scope of Supply
- ✓ MEG Reclamation Train Capacity
- ✓ Year of Commissioning
- ✓ Salt removal capacity and disposal details
   ✓ Performance Guarantees
- ✓ Client Name and Plant location
- ✓ Details of contractor's knowhow in MEG Reclamation chemistry
- Details of resources available to carry out FEED works along with CVs of Key Technical personnel having experience in similar works.
- Company profile and balance sheets for last five years.
- Present work commitments and anticipated work load.
- Valid ISO certification.
- Health, Safety, Environment policy followed and any relevant certification including HSE statistics of the company for the last five years.
- Any other relevant information that will establish that Contractor is a competent Service provider having proven MEG Reclamation technology.

# Category No: DEV/KGD6/2019/2 for Design, Engineering, Supply, Construction / Installation Supervision, Pre-commissioning and Commissioning of Additional MEG Reclamation Facilities

## > Scope

Design, Engineering, Supply, Construction / Installation Supervision, Pre-commissioning and Commissioning of Additional MEG Reclamation Facilities

#### Contractor shall submit

- Previous experience of Design, Engineering, Supply, Construction / Installation Supervision, Precommissioning and Commissioning of MEG Reclamation Facilities in the past 10 years.
- As a minimum, the following technical details shall be provided for MEG Reclamation Facilities supplied by the Contractor.

  - ✓ Scope of Supply✓ MEG Reclamation Train capacity
  - ✓ Year of Commissioning
  - ✓ Salt removal capacity and disposal details
  - ✓ Performance Guarantees
  - ✓ Client Name and Plant location
  - ✓ Details of contractor's knowhow in MEG Reclamation chemistry
  - ✓ Performance certificate from client for MEG Reclamation units
- Resources available to carry out detailed engineering, procurement, fabrication, assembly site supervision of packages along with CVs of Key Technical personnel having experience in similar
- Contractors shall also provide details of shop proposed for fabrication and assembly of packages along with track record for executing similar packages.
- Company profile and balance sheets for last five years.
- Present work commitments and anticipated work load.
- Valid ISO certification
- Health, Safety, Environment policy followed and any relevant certification including HSE statistics of the company for the last five years.
- Any other relevant information that will establish that Contractor is a competent service provider having proven MEG Reclamation technology.

# Category No: DEV/KGD6/2019/3 for Detailed Engineering Consultancy Services for provision of **Utilities and Integration of Additional MEG Reclamation Facilities**

## > Scope

Detailed Engineering Consultancy Services for provision of Utilities and Integration of Additional MEG Reclamation Facilities

#### Contractor shall submit

- Experience in providing similar type of service in last ten years.
- Contractor to provide details of contracts executed along with salient features of contracts viz technical information, order value and client contact details.

- Details of Equipment/Resources directly owned and details of key technical personnel.
- Company profile and audited financial results (balance sheet) for last five years.
- Present work commitments and anticipated work load.
- Health, Safety, Environment (HSE) policy followed and any relevant certification including HSE statistics of the company for the last five years.
- Any other relevant information that will establish that Contractor is a competent service provider.

# Category No: DEV/KGD6/2019/4 for Construction and Installation Services for Additional MEG Reclamation Facilities, Utilities and associated Civil and Piling works

## Scope

Construction and Installation Services for Additional MEG Reclamation Facilities, Utilities and associated Civil and Piling works

#### Contractor shall submit

- Experience in providing similar type of service in last ten years.
- Contractor to provide details of contracts executed along with salient features of contracts viz technical information, order value and client contact details.
- Details of Equipment/Resources directly owned and details of key technical personnel.
- Company profile and audited financial results (balance sheet) for last five years.
- Present work commitments and anticipated work load.
- Health, Safety, Environment (HSE) policy followed and any relevant certification including HSE statistics of the company for the last five years.
- Any other relevant information that will establish that Contractor is a competent service provider.

# <u>Category No: DEV/KGD6/2019/5 for Miscellaneous Services for Provision of Additional MEG</u> Reclamation Facilities and utilities

#### Scope

Miscellaneous Services for Provision of Additional MEG Reclamation Facilities and utilities

# Contractor shall submit

- Experience in providing similar type of service in last ten years.
- Contractor to provide details of orders/ contracts executed along with salient features of orders/ contracts viz technical information, order value and client contact details.
- Details of Equipment/Resources directly owned and details of key technical personnel.
- Company profile and audited financial results (balance sheet) for last five years.
- Present work commitments and anticipated work load.
- Health, Safety, Environment (HSE) policy followed and any relevant certification including HSE statistics of the company for the last five years.
- Any other relevant information that will establish that Contractor is a competent equipment/ material/ service provider.

## Contractors are requested to respond to one or more of following sub-categories:

DEV/KGD6/2019/5	Description	Reference No.
	<ol> <li>Design, Supply and Installation of various types of piles including spun piles</li> </ol>	DEV/KGD6/2019/5.1
	2. Metallurgical testing services for MEG Reclamation Facilities	DEV/KGD6/2019/5.2
Miscellaneous Services for	3. MEG Chemistry studies including pH mapping, scaling, precipitation, chemical selection etc.	DEV/KGD6/2019/5.3
Provision of	4. Geo Technical Services	DEV/KGD6/2019/5.4
Additional MEG Reclamation Facilities and utilities	5. Soil Investigation Services	DEV/KGD6/2019/5.5
	6. Installation of GRE piping	DEV/KGD6/2019/5.6
	7. Power system studies	DEV/KGD6/2019/5.7
	8. Third Party Inspection Services.	DEV/KGD6/2019/5.8
	<ol><li>Third Party Consultancy services for HAZOP, SIL, FSSR and other safety studies</li></ol>	DEV/KGD6/2019/5.9

10. IT services and supply of softwa	re	DEV/KGD6/2019/5.10
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# Category No: DEV/KGD6/2019/6 for Supply of Equipment, Materials and bulks for provision of Additional MEG Reclamation Facilities and utilities

## > Scope

Supply of Equipment, Materials and bulks for provision of Additional MEG Reclamation Facilities and utilities

### > Contractor shall submit

- Experience in providing similar types of Equipment/ Material in last ten years. Contractor to provide details of orders/ contracts executed along with salient features of supply viz technical information, order value and client contact details.
- Details of Equipment/ Resources/ Facilities directly owned and details of key technical personnel.
- Company profile and audited financial results (balance sheet) for last five years.
- Present work commitments and anticipated work load.
- Health, Safety, Environment (HSE) policy followed and any relevant certification including HSE statistics of the company for the last five years.
- Any other relevant information that will establish that Contractor is a competent equipment/ material/ service provider.
- Contractors are requested to respond to one or more of following sub-categories:

DEV/KGD6/2019/6	Description	Reference No.			
	I. Supply of Mechanical Packages and Equipment				
	Pressure Vessels, Distillation Columns (Cladded and Non-Cladded).	DEV/KGD6/2019/6.1			
	2. Internals for Pressure Vessel and Column	DEV/KGD6/2019/6.2			
	3. API & Non API Pumps	DEV/KGD6/2019/6.3			
	4. Liquid ring Vacuum Pumps	DEV/KGD6/2019/6.4			
	5. Brine Pumps, screw pumps.	DEV/KGD6/2019/6.5			
	6. Heat exchangers (Shell tube type, Spiral type and plate type etc)	DEV/KGD6/2019/6.6			
	7. Air cooled heat exchangers	DEV/KGD6/2019/6.7			
	8. Air-conditioning, ventilation and Pressurization System equipment and accessories.	DEV/KGD6/2019/6.8			
	9. Air-conditioning, ventilation and Pressurization System equipment and accessories for Hazardous area.	DEV/KGD6/2019/6.9			
Supply of Equipment,	10. Air Cooled and Water Cooled Chillers.	DEV/KGD6/2019/6.10			
Materials and bulks for	11. Process Chiller package	DEV/KGD6/2019/6.11			
provision of Additional	12. Insulation (Hot and Cold) for Equipment / Piping etc.	DEV/KGD6/2019/6.12			
MEG Reclamation	13. Chemical Dosing Packages.	DEV/KGD6/2019/6.13			
Facilities and utilities	14. EOT Cranes, Hoists and chain pulley block suitable for Hazardous area.	DEV/KGD6/2019/6.14			
	15. Blast Proof/ Resistant Doors and Dampers.	DEV/KGD6/2019/6.15			
	16. Nitrogen Generation Package	DEV/KGD6/2019/6.16			
	17. Water Treatment / Effluent Treatment Plant	DEV/KGD6/2019/6.17			
	18. Air Compressor (Dry screw/Air-cooled ) & PSA type air dryer package	DEV/KGD6/2019/6.18			
	II. Supply of Electrical Equipment and Bulks				
	19. Power Transformers ( > 2.5 MvA)	DEV/KGD6/2019/6.19			
	20. HV Switchgears and Switchboards (3.3 kV, 6.6 kV, 11 kV, 33 kV)	DEV/KGD6/2019/6.20			
	21. FRP Cable trays - Ladder & perforated type with accessories	DEV/KGD6/2019/6.21			
	22. GI Cable trays - Ladder & perforated type with accessories	DEV/KGD6/2019/6.22			

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23.LV Bus Duct	DEV/KGD6/2019/6.23
24. HV Bus Duct	DEV/KGD6/2019/6.24
25. HV Power Cables	DEV/KGD6/2019/6.25
26. LV Power & Control Cables	DEV/KGD6/2019/6.26
27. Electrical Heat Tracing Systems	DEV/KGD6/2019/6.27
28. Lighting Fixtures (Office area)	DEV/KGD6/2019/6.28
29. Lighting Poles	DEV/KGD6/2019/6.29
30. Lighting Fixtures for Hazardous Area	DEV/KGD6/2019/6.30
31. Industrial Lighting Fixtures	DEV/KGD6/2019/6.31
32. High Mast Lighting system	DEV/KGD6/2019/6.32
33. Neutral Earthing Resistors with panel	DEV/KGD6/2019/6.33
34.Electrical Protection Relays	DEV/KGD6/2019/6.34
35. Soft Starters	DEV/KGD6/2019/6.35
36. Oil filled Distribution Transformers (<= 2.5 MVA)	DEV/KGD6/2019/6.36
37. UPS System for IT & computers	DEV/KGD6/2019/6.37
38. UPS system for process area	DEV/KGD6/2019/6.38
39. Variable Frequency Drives with Panel	DEV/KGD6/2019/6.39
40. Batteries for UPS system – Lead Acid / VRLA/ NI-CD	DEV/KGD6/2019/6.40
41. LV Switchboards / Switchgears and Motor Control Centers / PMCC / PCC	DEV/KGD6/2019/6.41
42. Lighting and power distribution boards indoor / Outdoor	DEV/KGD6/2019/6.42
installation	DE V/NGD0/2019/0.42
43. Push button station, sockets, JBs, etc. – Suitable for	DEV/KGD6/2019/6.43
hazardous area installation	DE V/NOD0/2019/0.43
44. Push button station, sockets, JBs, etc. – Industrial type	DEV/KGD6/2019/6.44
III. Supply of Instrumentation equipment and bulks	
45. Process Control & Monitoring System – Integrated	DEV/KGD6/2019/6.45
Control System (DCS, ESD, MIS)	DE V/NOD0/2019/0.43
46. Fire & Gas Detection System with associated field	DEV/KGD6/2019/6.46
devices and accessories, building fire alarm system	
47. Machine Condition Monitoring System.	DEV/KGD6/2019/6.47
48. Pressure safety valves, Vacuum Safety Valves, Rupture	DEV/KGD6/2019/6.48
discs	
49. Valves (Control Valves, Self-acting / Pressure	DEV/KGD6/2019/6.49
Regulating Valves).	
50. On-Off Valves, Motor Operated Valves	DEV/KGD6/2019/6.50
51. CCTV System	DEV/KGD6/2019/6.51
52. Instrumentation Cables, Foundation Field bus & Fiber	DEV/KGD6/2019/6.52
Optic Cables.	DE: ///OD 0/00/00/00 TO
53. Pressure and Temperature Transmitters	DEV/KGD6/2019/6.53
54. Pressure and Temperature gauges	DEV/KGD6/2019/6.54
55. Flow Transmitters	DEV/KGD6/2019/6.55
56. Level Instruments	DEV/KGD6/2019/6.56
57. Primary Flow Instrument – Orifice/ Venturi / Restriction	DEV/KGD6/2019/6.57
Orifice	
58. pH and Conductivity Meter, Analyzer	DEV/KGD6/2019/6.58
59. Corrosion probes	DEV/KGD6/2019/6.59
60. Junction boxes, Instrument tubing and fittings and bulks,	DEV/KGD6/2019/6.60
Multi Cable Transit, Cable trays, installation accessories	
61. RTD/ Thermocouple with thermowell & assemblies	DEV/KGD6/2019/6.61
62. Security and automation system.	DEV/KGD6/2019/6.62
63. PA/GA System	DEV/KGD6/2019/6.63
64. PA/GA cables	DEV/KGD6/2019/6.64
65. IT and Telecom equipment and accessories	DEV/KGD6/2019/6.65
IV. Supply of Piping items and bulks	
66. Pipes of (NACE / Non NACE) CS, LTCS, SS, 6Mo, DSS,	DEV/KGD6/2019/6.66

	Super Duplex, and GI.	
<del> </del>	67. Pipe Fittings of (NACE / Non NACE) CS, LTCS, SS,	DEV/KGD6/2019/6.67
	6Mo, DSS, Super Duplex, and GI.	DEV/RGD0/2019/0.07
	68. Flanges of (NACE / Non NACE) CS, LTCS, SS, 6Mo,	DEV/KGD6/2019/6.68
	DSS, Super Duplex, and GI.	
	69. Supply of All types of Piping Valves (Gate, Globe, Check,	DEV/KGD6/2019/6.69
	Ball, Needle, Butterfly, Axial flow non-slam check, Air release	
	valves etc of (NACE / Non NACE) CS, LTCS, SS, 6Mo, DSS	
	and Super Duplex.	
	70. HDPE Pipes and fittings.	DEV/KGD6/2019/6.70
	71. Piping Specialty Items and supports	DEV/KGD6/2019/6.71
	72. Coatings and Wrappings for corrosion protection of UG	DEV/KGD6/2019/6.72
	pipes	
	73. GRE Pipes & Fittings	DEV/KGD6/2019/6.73
	74. Insulation for piping / Equipment / Vessels	DEV/KGD6/2019/6.74
	75. Stud bolts, nuts, Gaskets, Insulating gaskets	DEV/KGD6/2019/6.75
	76. Process strainers (Y-type, Basket type, T-type, cone type	DEV/KGD6/2019/6.76
	etc.)	
	77. Flame arrestors	DEV/KGD6/2019/6.77
	78. Hose and Hose couplings	DEV/KGD6/2019/6.78
	79. Air/ Gas traps	DEV/KGD6/2019/6.79
	80. Injection quills	DEV/KGD6/2019/6.80
	81. Sample coolers	DEV/KGD6/2019/6.81
	82. Bellows (metallic and Non-metallic)	DEV/KGD6/2019/6.82
	V. Supply of Fire protection system items	
	83. Supply and application of Fire Proofing.	DEV/KGD6/2019/6.83
	84. Engineering and Supply of Fire Fighting System /	DEV/KGD6/2019/6.84
	Equipment.	
	85. Supply of Building Fire Alarm System and Process Fire &	DEV/KGD6/2019/6.85
	Gas System.	
	86. Consultancy Service for Design & Review of Fire	DEV/KGD6/2019/6.86
	Detection &	
	Suppression System.	
Γ	87. Deluge Valves	DEV/KGD6/2019/6.87
	88. Fire water Hydrant, Hydrant valve and Fire water	DEV/KGD6/2019/6.88
	monitors	
, <del>-</del>	89. Spray Nozzles	DEV/KGD6/2019/6.89
-	90. Fire hose, Fire cabinet, Hose reel etc.	DEV/KGD6/2019/6.90
-		DEV/KGD6/2019/6.90 DEV/KGD6/2019/6.91

# Category No: OAM/KGD6/2019/7 for Multi Support Vessel for Sub-Sea Intervention.

#### Scope

Provide Multi Support Vessel (MSV) with DP capabilities for performing subsea intervention (including IMR) work in shallow water & deep water up to water depth of 2200m.

### > Contractor shall submit

- Details of Multi Support Vessel /Vessels proposed by Contractor, such as:-
  - ✓ Vessel technical specifications including details of AHC Crane, Work class ROV, DP system, Deck space, Accommodation details etc. including the water depth capability of Crane and ROV
  - ✓ Owner / Operator
  - √ Flag / Year of Construction and Name of Construction Yard
  - ✓ Class certificates
- Details of contracts executed with Multi Support Vessel related to Sub-Sea Intervention including IMR (Inspection, Maintenance, Repair/ Replacement) by the Contractor in the last 10 years with following details-

- ✓ Client
- ✓ Client references
- ✓ Details of MSVs
- ✓ Type of IMR Jobs performed
- ✓ Water depth
- ✓ Schedule start and end dates
- ✓ Performance record
- List of key personnel having experience in similar work along with CVs.
- Present work commitments and anticipated work load. (Please attach copies of current contractual commitments and availability of the vessels)
- Company profile and audited financial results (Balance sheet) for last five years.
- Brief on Health, Safety, Environment (HSE) and Quality Assurance systems followed and any relevant certification including safety statistics of the company in the last five years.
- Any other relevant information that will establish that Contractor is a competent MSV Owner/ Operator.

## Category No: OAM/KGD6/2019/8 for Painting of Fixed Offshore Platform

# Scope

- The Scope of Work is to supply & apply of Painting for Fixed Platform for Decks & Jacket Structure including Splash zone.
- Surface preparation and application of the painting system on the exterior surfaces of all types of production facilities including structural steel, vessels, piping and equipment on offshore platform.
- Erection & Dismantling of Suspended Jacket system, Scaffolding, Rope Access Services & Air Diving services as per the location requirement of the fixed platform.

#### > Contractor shall submit

- Provide track record and experience in carrying out similar projects of international standard in last ten years. Contractor to provide the following information:
  - ✓ Client
  - √ Field/ Facility / asset
  - ✓ Water Depth range
  - ✓ Scope of Job
  - ✓ Spread Supplied
- Details of resources with CVs of key technical personnel and proposed work centre(s).
- Inventory of equipment spreads maintained by Contractor.
- Brief on Health, Safety, Environment (HSE) and Quality Assurance systems followed and any relevant certification including safety statistics of the company in the last five years.
- Company profile and audited financial results (Balance Sheet) for last five years.
- Present work commitments and anticipated work in next 24 months.
- Any other relevant information that will establish that Contractor is a competent service provider.

The above information for all the categories is to be submitted in the Summary Sheet as given below.

CONTRACTOR'S DETAILS	
Name of the Company	
EOI Ref.	
EOI Date.	
Key Contact Details	
Name:	
Tel No:	
Email:	

	SUMMARY SHEET									
	[TO BE SUBMITTED ON A CD/DVD & TWO HARD COPIES]									
Category/ Sub - category No.	Category of Equipment /Materials /Services	Broad Specification s/ details of Equipment/ Vessel/ Resources (as applicable)	Contractor 's past performan ce and supply record	List of major clients (covering Projects of preceding years , as applicable including ongoing projects)	Approx. value of Contracts	Contra ct period	Compan y profile	Certificates API / ISO or others as applicable & validity (attach copies)		
Note: Prefer	ence will be	given to ISO ce	ertified Organ	nizations.						

Interested Contractors are requested to submit their Expression of Interest (hard copies in duplicate along with electronic copy on CD/DVD) with all details through courier / post and also through e-mail on <a href="mailto:deveoiresponse.eandp@ril.com">deveoiresponse.eandp@ril.com</a>, on or before 18th February 2019. The envelope should be superscribed as RIL/E&P/EOI/2019/01 along with category number.

## Address for Communication:

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