

i | b | c | l

International Business Consultancy Ltd., UK

FICCI

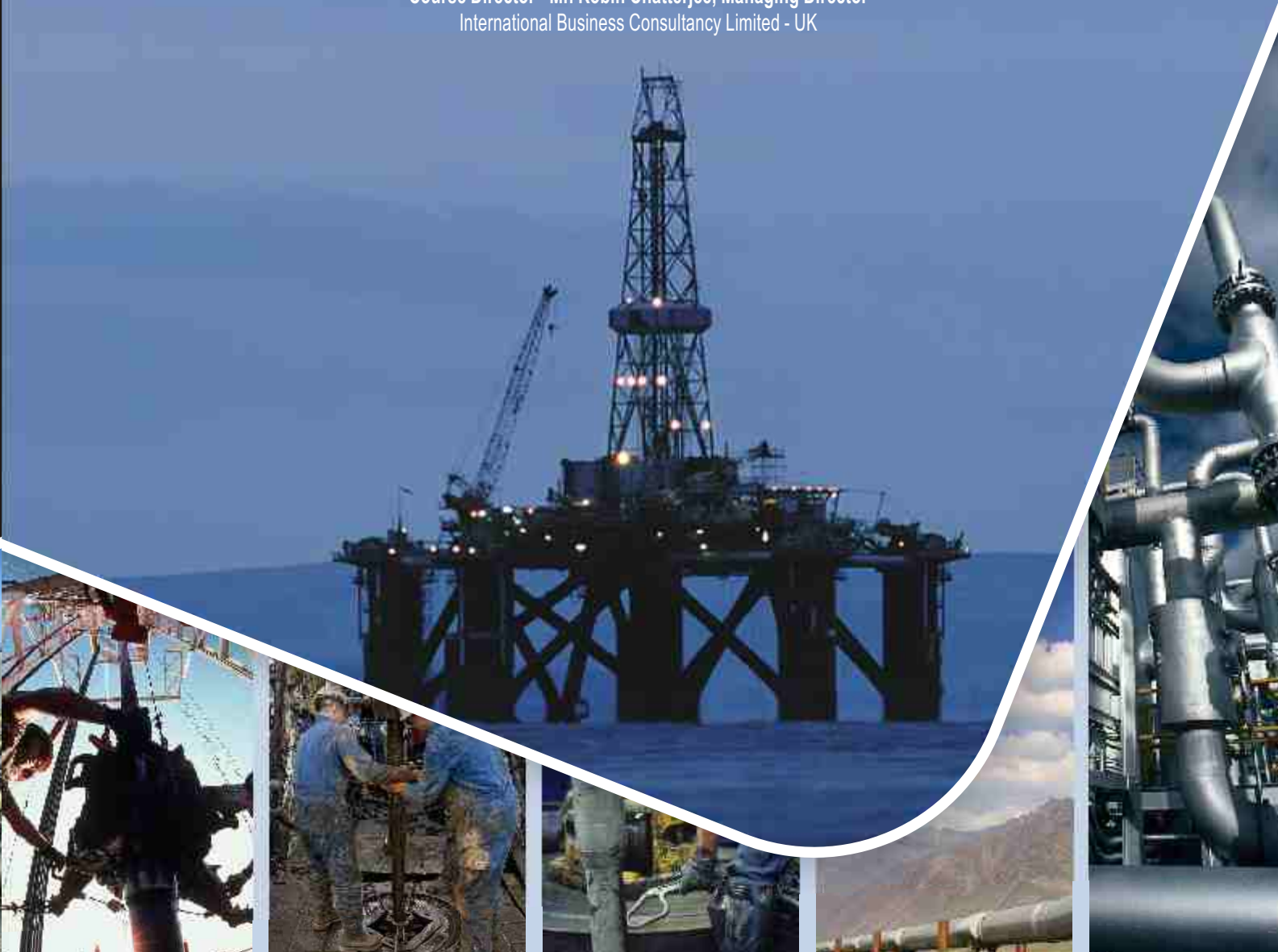
Federation of Indian Chambers
of Commerce and Industry

Training Course on
GAS / LNG and
Gas Transportation Contracts -
Structuring, Negotiation & Pricing

May 10 - 14, 2010

FICCI, Federation House, Tansen Marg, New Delhi, India

Course Director - Mr. Robin Chatterjee, Managing Director
International Business Consultancy Limited - UK



Training Course on
GAS / LNG and
Gas Transportation Contracts -
Structuring, Negotiation & Pricing

Course Objectives

Due to the long term nature of gas transactions between buyers and sellers, it is commercially prudent for those involved in this process to know the available techniques of price determination and contract structure to provide adequate safeguard for the future. Any misjudgement in any of these areas could result in significant financial consequences and legal liabilities.

This course has, therefore, been designed to enable the professionals in the gas sector and gas advisory services to negotiate from a position of strength and knowledge in order to gain a competitive edge in the process. The course aims to:

- Explain the underlying principles and provide hands on experience of formulation of LNG/Gas and Gas Transportation Contracts.
- Explain the principles and provide working knowledge of the practical aspects of pricing of natural gas and LNG in a competitive gas market with reference to other competing fuels and under gas to gas competition and determination of transportation tariff.
- Provide an overview of the current developments in international LNG and gas trades in Europe, USA, Middle East, Atlantic and Mediterranean basins and Asia Pacific region.
- Provide a comprehensive guide to contract negotiation techniques.



Course Content: Key learning areas & Sessions

Contracts

Session 1 - Gas Industry : Technical background, regulation & global trade

1. Gas/LNG measurement units and conversion factors
2. Technical aspects of gas/LNG chain and definitions
3. Comparison between gas transportation by pipeline, LNG, CNG and GTL
4. Gas/LNG market structure and gas industry regulatory issues
 - ⚙️ Vertically integrated structure
 - ⚙️ Unbundled operation
 - ⚙️ Contract carriage/mandatory open access
 - ⚙️ Regulatory model of USA, UK and India
5. Overview of global gas/LNG trade worldwide as at the end of 2009
 - ⚙️ LNG balance, new LNG sources
 - ⚙️ International pipeline trade
 - ⚙️ Geopolitical issues
 - ⚙️ Possible global supply/demand mismatch
6. Profile of gas trade of China, Korea, Japan, Australia and India (as requested by the participants)

DAY 1

Session 2 - Gas/LNG Contracts – Basic Principles

7. Basic principles and their construction – operational, commercial and legal basis for long term contracts
8. Interdependence of contracts in the gas/LNG Chain
9. Contract aim – risk mitigation and commercial value
10. Reasons for success & failure of contracts - retrospective analysis

Session 3 - Gas/LNG Contracts - Underlying rationale

11. Background to long term gas contracts - rationale for the contract terms

Session 4 - Gas/LNG Contracts - Terminologies and derivations

12. Gas contract terminologies with calculations – to cover DCQ, ACQ, MTQ, TOP, Make Up, Carry Forward, Shortfall and Annual Reconciliation
13. LNG contract terminologies with calculations - to cover Downward and Upward Flexibilities, Make Good, Make Up, Take or Pay, Carry Forward, Shortfall, Rounding Up/Down and Restoration Quantities

DAY 2

Session 5 - Key types of Gas/LNG Contracts

14. Contracts in the gas chain
 - ⚙️ Upstream E & P – IP, 2P, 3P concepts
 - ⚙️ Concessions, Production Sharing Contracts, Royalties and Taxes, Service and Buy Back
 - ⚙️ Feed Gas Contract
 - ⚙️ Gas Sales and Purchase Agreement (GSPA)
 - ⚙️ Supply and Depletion Contract
 - ⚙️ Tolling Contract and Spot Purchase Agreement
 - ⚙️ LNG Sales and Purchase Agreement (SPA)
 - ⚙️ Gas Transportation Agreement (GTA)

Session 6 - Gas & LNG Contracts Chain - Order of Articles & Detailed Explanation

15. Contract sequence: flow chart explaining separately, gas and LNG contract chain
16. Checklist of Articles for inclusion in the gas and LNG contract with detailed explanations of their basis and composition

Training Course on GAS / LNG and Gas Transportation Contracts - Structuring, Negotiation & Pricing

DAY 2

Session 7 - Explanation of Contract Articles

17. Gas contract: Operational and commercial clauses to include Recital, Scope, First Supply Date, Commencement, Conditions Precedent, Quantities, Quality Specification, Pressure, Measurement, Facilities, Maintenance, Nominations, Shortfall Liabilities, Take or Pay provisions, Billing / payment
18. LNG contract – structure of LNG contract, summarised articles as above plus Shipping and measurement
19. Legal clauses covering Force Majeure, Dispute Resolution, Termination, Liabilities and Indemnities specific to gas/LNG contracts

Session 8 - Model Gas and LNG and Gas Transportation Contract - International Examples

20. Current trends in LNG/gas contracts worldwide
21. Model Gas Sales and Purchase Agreement
22. Model LNG Sales and Purchase Agreements
23. Specific provision:
 - ⊗ Price reopener clause – current trends
 - ⊗ Dispute resolution, Sole Expert, Arbitration, Reconciliation, available international forums
 - ⊗ Side Letters
 - Payment security mechanism
 - Step in rights
 - Change in contract provision

Session 9 - Shipping and Risk Mitigation

24. Shipping contract and ship chartering, CIF, FOB, Time Charter, Bareboat and Contract of Affreightment
25. Commercial implications of financing LNG ships, share of risk to different parties
26. LNG/gas contract risk allocation matrix, mitigation measures

Session 10 - Gas Transmission and Transmission Agreement

27. Flexibility mechanism in the gas market
28. Gas balancing and management of over/under run and imbalance
29. Concept of high pressure gas transmission
30. Standard transportation contract – checklist of Articles
31. Gas Management System (GMS)
32. Model gas transmission agreement

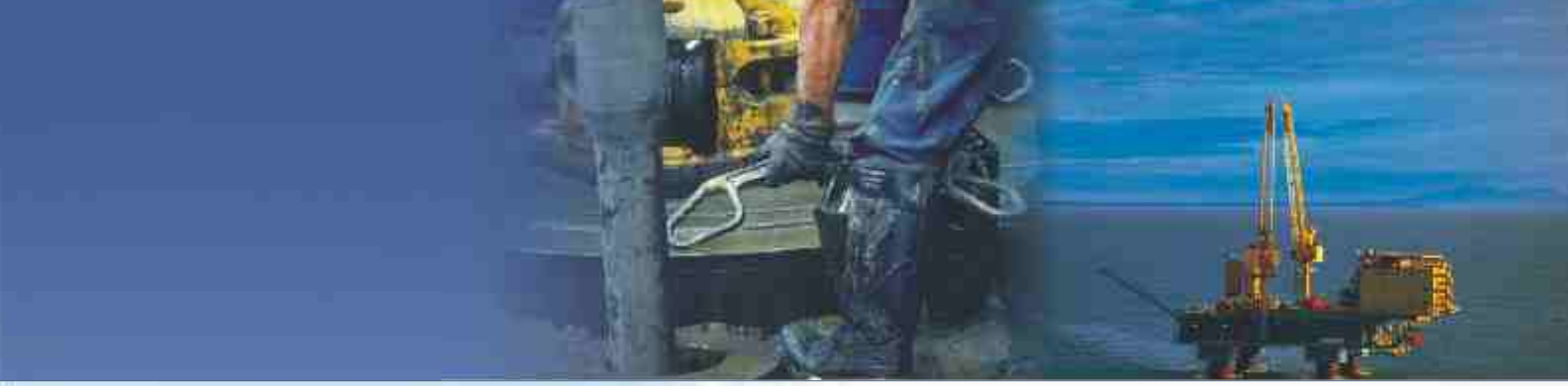
DAY 3

Session 11 - Gas/LNG Contract Negotiation – Principles and Techniques

33. Contract negotiation stages - MOU, HOA, SPA and GSPA
34. Contract law and legal significance
35. Important concepts: balance of power between two parties, mutuality, interpersonal, orientation, Best Alternative to No Agreements (BATNA), resistance point and final deal
36. Contract negotiation stages – preparation, fact finding, proposal, bargaining, tradable variables, offer of concession
37. Profile of a successful negotiator

Session 12 - Contract Negotiation – Case Studies

38. Contract negotiation case studies based on experience of four gas/LNG gas transportation contracts involving
 - ⊗ Preparatory stage prior to negotiations
 - ⊗ Background study
 - ⊗ Listing of issues
 - ⊗ Assigning settlement ranges
 - ⊗ Tradable variables
 - ⊗ Determination of possible concessions
 - ⊗ Final outcome



Pricing

Session 13 - Gas/LNG Pricing Trends & Main Concepts

39. Gas/LNG pricing – basic principles and main drivers globally
40. Current international gas/LNG pricing trends as at the end of 2009
41. Commercially justifiable price chargeable by an aggregating Local Distribution Company (LDC) under:
 - ⊗ LNG import parity against price of domestic gas
 - ⊗ LNG export parity against domestic use
 - ⊗ Wholly LNG import dependencies
42. An example of gas price setting complying with both financial and net back market value criteria
43. Concept of price based on imputed value, opportunity cost, market value and price pooling criteria.
44. Principle of gas pricing based on usage load factor

Session 14 - Economic Evaluation and Financial Modelling

45. Economic evaluation
 - ⊗ Cost of capital to a gas company
 - ⊗ DCF analysis parameters
 - ⊗ Sensitivity analysis
46. Modelling applicable to Gas/LNG trade:
 - ⊗ to determine financial justification of investment in gas assets
 - ⊗ to work out gas price and gas transportation tariff
 - ⊗ to change variable parameters to derive a predetermined outcome (price or investment limit)
47. Modelling will be linked to cost of service and discounted cash flow methods

Session 15 - Gas/LNG Pricing Methodologies and Price Indexation

48. Gas Pricing based on Cost Plus (accounting method), DCF Analysis, netback market value, Cost of Service (CoS) and open market competition
49. Gas/LNG pricing based on Net Back methodology in
 - ⊗ Domestic market against competing gas, fuel oils
 - ⊗ Electricity generation against competing naphtha and coal
50. Gas/LNG pricing indexation
 - ⊗ Absolute price of reference fuel/basket of fuels
 - ⊗ P_o indexed to movement in reference fuel
 - ⊗ Mixed indexation based on different weighting of reference fuel
 - ⊗ Ceiling, Floor, S-curve
 - ⊗ Linked to Products using Price to Produce

Session 16 - LNG Pricing Options and Strategies

51. Global LNG pricing methodologies under
 - ⊗ Henry Hub (USA), National Balancing Point (UK)
 - ⊗ Oil price indexation (JCC, crude parity etc)
 - ⊗ Negotiated base price (P_o) indexed by crude derivatives (weighted)
 - ⊗ Asia Pacific trends ($ax + b$, x representing oil price)
52. Gas/LNG pricing strategy in a mixed market situation
 - ⊗ Financial model for shipping cost
 - ⊗ Gas volume requirement per tonne of LNG
 - ⊗ FOB price sensitivity given the downstream market conditions
 - ⊗ Shipping distance sensitivities



Training Course on **GAS / LNG and Gas Transportation Contracts - Structuring, Negotiation & Pricing**

DAY 5

Session 17 - Transportation tariff

53. Transportation Tariff determination methodologies – DCF and COS based - International examples : UK & USA
54. Revenue target and cost recovery methodologies in transportation tariff determination process
55. Capacity and commodity based tariff - example
56. Transportation tariff regulation

Session 18 - LNG Trading, Gas pricing exercise

57. Spot, Arbitrage and Swaps
 - ⊗ Model for arbitrage pricing
 - ⊗ Gas/LNG spot trade
58. Exercise involving determination of gas price and gas transportation tariff

Session 19 - Project Financing Strategy

59. Criteria for financing of Gas/ LNG projects
 - ⊗ Recourse financing
 - ⊗ Non recourse financing
 - ⊗ Limited recourse financing
60. Risk sharing
 - ⊗ Political risk mitigation
 - ⊗ Project lenders' expectations

Session 20 - Practical Exercise & Group Discussion

61. Exercise on Gas/LNG Sales/Purchase Strategy
62. Exercise involving formulation of contract terms and pricing related to
 - ⊗ LNG Sales and Purchase Agreement (SPA)
 - ⊗ Gas Sales and Purchase Agreement (GSPA)
 - ⊗ Gas Transportation Agreement (GTA)
63. Group discussion to construct Heads of Agreement covering
 - ⊗ Project commencement date
 - ⊗ Commissioning
 - ⊗ Conditions precedent
 - ⊗ Default liabilities
 - ⊗ Force majeure conditions
 - ⊗ Gas/LNG sales price estimate in the chain
64. Transfer pricing
 - ⊗ Producing field to liquefaction terminal
 - ⊗ Liquefaction terminal to regasification terminal (FoB)
 - ⊗ Regasification terminal to gas trader
 - ⊗ Gas trader to end consumer
 - ⊗ End consumer price to include gas transportation tariff

Training Method

Training material is divided into five parts, with four sessions in each part (total of 20 sessions) which will be presented in the form of power point slides, charts, diagrams and graphs. Each theoretical aspect, as appropriate, will be covered by case studies, actual contract and latest techniques in contract drafting, LNG supply - demand position and gas / LNG pricing, as at the end of 2009.

Course Director, where considered useful, will support all major contract pricing principles by his own live experiences of 15 different markets, spanning over 30 years. Course would mainly cover LNG /gas and gas transportation/distribution contracts, gas / LNG pricing and gas transportation tariff. Each session will be followed by open discussions, including course director's view on the issues raised by the participants. The course material containing over 1500 power point slides, arranged in five volumes, will be distributed to the participants for future reference.



Who may attend

- ⊗ Personnel from finance, corporate strategy, marketing, development and investor relations professionals involved in gas, LNG, gas transmission, LNG shipping, gas distribution and gas based power generation sectors.
- ⊗ Professionals from investment banking, project finance, asset management, hedge funds, or equity/ fixed income research related to gas/LNG trade
- ⊗ Consultants, accountants and lawyers who advise power and gas sector
- ⊗ Gas industry regulators
- ⊗ Senior Executives from national, international and independent energy companies
- ⊗ Gas and LNG research and consulting specialists
- ⊗ Inter-governmental agencies involved in energy sector
- ⊗ Natural gas producing (exploration and production) and trading companies – (marketing, commercial, contract negotiation functions)
- ⊗ Petrochemical companies – gas purchasing, finance and pricing
- ⊗ Product traders and industry analysts
- ⊗ International engineering and contracting firms supporting gas/LNG sectors
- ⊗ Officials involved in the planning and development of gas-related projects
- ⊗ LNG shipping, gas pipeline and high pressure transportation specialists

About the Course Director



Robin Chatterjee has, for the last 16 years, been an adviser to some of the largest oil and gas majors in the world engaged in E&P, gas transportation, distribution, LNG importation and cross country gas trade. He has negotiated LNG/Gas Purchase Contracts with Qatar, Yemen, Malaysia, Vietnam, Bangladesh, Egypt, Oman, Iran and Nigeria as well as most of the international Gas Purchase and Transportation Contracts with overseas JV partners operating in the Indian gas sector. Robin Chatterjee has worked on proposals involving international gas transit from Iran to India, Turkmenistan to India via Afghanistan and Pakistan, sub sea pipeline from Oman to India, import of Russian gas to South Korea, transportation tariff strategy, regulatory issues and gas pricing matters in India, Bangladesh, UK, Europe, Egypt, Nigeria, Pakistan and USA for the last 16 years.

He has conducted a number of three to five day gas/LNG courses in Dubai, South Korea, Iran, Kuala Lumpur, Singapore, Thailand, Australia and India and has been a regular speaker at international conferences. Prior to his present consultancy work spanning over the past 16 years, Robin spent 25 years (between 1968 – 1993) at British Gas Plc in UK in corporate finance division in London and in British Gas's Midlands region working on transportation tariff, gas pricing, gas deregulation, international contracts, purchase of international oil and gas assets and financial strategy of British Gas in the UK and worldwide.

Robin Chatterjee is widely known in the international gas sector as a successful strategist, negotiator and speaker at international forums. Robin has a degree in engineering and is a MBA and Chartered Institute of Management Accountant. He is currently residing in UK.



Training Course on
GAS / LNG and
Gas Transportation Contracts -
Structuring, Negotiation & Pricing

Registration Details

Name

Title

Company / Organisation

Address

..... Pin

Country

Telephone

Fax

E-mail

Bank Draft / Cheque No / Electronic Transfer

..... Dated

For Rs / USD

Drawn on in favour of FICCI, payable at New Delhi towards payment of registration fee for the training program is enclosed.

Date

Signature

Please make cheques payable at Delhi
Foreign Delegates may remit fee in USD or its equivalent convertible currency

Registration Fees

Delegate/Companies	Before April 15, 2010	After April 15, 2010
Indian*	Rs 1,50,000 per delegate	Rs 1,75,000 per delegate
Overseas**	USD 3,000 per delegate	USD 3,500 per delegate

*companies registered in India

**International Companies registered outside India

For Further details, contact

Ms Tavleen Kaur / Ms Gayatri Prabhakar

Energy Division - FICCI

Federation of Indian Chambers of Commerce & Industry

Federation House, Tansen Marg, New Delhi - 110 001

Ph : + 91 11 2373 8760 - 70 (# 213 / # 201), 2370 8062, 2335 4801, 2376 5338 (D)

Fax: + 91 11 2376 5333, 2332 0714, 2372 1504

E-mail : tavleen@ficci.com / gayatri.prabhakar@ficci.com

For Course details, visit us at : www.ficci.com

Payment Options

Option I : Payment through Wire Transfer

Beneficiary Bank details :

1. Name & Address of Bank	United Bank of India, Overseas Branch HS-32 Kailash colony Market , 1st floor, New Delhi –110048 (India)
2. Name of Account	FICCI
3. Type of Bank Account	SAVINGS
4. Bank Account No. to which the amount to be transferred	1412010031259
5. SWIFT Code of Bank	BIC UTBIINBBDEL
6. Service Tax Code	AAA CF 1282 E ST 001
7. Pan No.	AAA CF 1282 E

Intermediary Bank Details:

1. Name & Address of Bank	Standard Chartered Bank, New York
2. Account No.	3582021835001
3. SWIFT Code	SCBLUS33
4. Account Number of Beneficiary's Bank with Intermediary Bank	3582021835001

GBP Only

Beneficiary Bank Details:

1. Name & Address of Bank	United Bank of India, Overseas Branch HS-32 Kailash colony Market, 1st floor, New Delhi –110048 (India)
2. Name of Account	FICCI
3. Type of Bank Account	SAVINGS
4. Bank Account No. to which the amount to be transferred	1412010031259
5. SWIFT Code of Bank	BIC UTBIINBBDEL
6. Service Tax Code	AAA CF 1282 E ST 001
7. Pan No.	AAA CF 1282 E

Intermediary Bank Details:

1. Name & Address of Bank	HSBC - LONDON
2. Account No.	-
3. SWIFT Code	MIDLGB22
4. Account Number of Beneficiary's Bank with Intermediary Bank	-

Option II: Payment through RTGS

1. Vendor Name	FICCI
2. Beneficiary Address	Federation House, Tansen Marg, New Delhi -110001
3. Beneficiary Name (if different from the vendor name)	FICCI
4. Beneficiary Bank Name	United Bank Of India
5. Beneficiary Bank Branch Address	Tansen Marg , New Delhi-110001
6. Beneficiary Bank A/c No	035901-8009732
7. Type of Bank A/c (Current A/c / Saving A/c or Cash Credit A/c)	Savings
8. Service tax code	AAACF1282E ST 001
9. Service Tax no.	Mandap Keeper / DEL / 73 FI / 97
10. PAN No.	AAA CF 1282 E
11. TAN No.	DELF02330G
12. NEFT/ IFSC Code of the bank branch of the Beneficiary	UTBI0TNM 709 *
13. RTGS Code of the bank branch of the Beneficiary if different from NEFT	UTBI0TNM 709 *
14. MICR Code appearing on the cheque of the bank a/c of Beneficiary	110027020
15. Email ID	dkr@ficci.com / accounts@ficci.com
* UTBIO (zero)	

Option III: Payment through Demand Drafts/ Cheques

To be drawn in favor of FICCI, payable at New Delhi (Outstation Cheques are not acceptable)

About FICCI

Established in 1927, FICCI is the largest and oldest apex business organisation in India. Its history is closely interwoven with India's struggle for independence and its subsequent emergence as one of the most rapidly growing economies globally. FICCI plays a leading role in policy debates that are at the forefront of social, economic and political change. Through its 400 professionals, FICCI is active in 52 sectors of the economy. FICCI's stand on policy issues is sought out by think tanks, governments and academia. Its publications are widely read for their in-depth research and policy prescriptions. FICCI has joint business councils with 79 countries around the world.

A non-government, not-for-profit organisation, FICCI is the voice of India's business and industry. FICCI has direct membership from the private as well as public sectors, including SMEs and MNCs, and an indirect membership of over 83,000 companies from regional chambers of commerce.

FICCI works closely with the government on policy issues, enhancing efficiency, competitiveness and expanding business opportunities for industry through a range of specialised services and global linkages. It also provides a platform for sector specific consensus building and networking. Partnerships with countries across the world carry forward our initiatives in inclusive development, which encompass health, education, livelihood, governance, skill development, etc. FICCI serves as the first port of call for Indian industry and the international business community.

Contact Details

Ms Tavleen Kaur / Ms Gayatri Prabhakar

Energy Division - FICCI

Federation of Indian Chambers of Commerce & Industry

Federation House, Tansen Marg, New Delhi - 110 001

Ph : + 91 11 2373 8760 - 70 (# 213 / # 201), 2370 8062, 2335 4801, 2376 5338 (D)

Fax: + 91 11 2376 5333, 2332 0714, 2372 1504

E-mail : tavleen@ficci.com / gayatri.prabhakar@ficci.com

For Course details, visit us at : www.ficci.com

