

Offshore Pipelines & Control Lines Market Update Report To 2014

The global recession has impacted the offshore oil and gas industry and consequently the line market through the softening of energy demand and a reduction in available credit. The fifth edition highlights the return of liquidity and the hesitant signs of pick-up within the market and forecasts a steady growth of 6% over the next five years.

The Pipelines & Control Lines Market:

Since 2008, operators' short term strategies and forecast spends have been downgraded with the weakening energy demand and lack of available credit. The global recession has had many impacts on the market, and as such the industry will still feel the effects of this 'down turn' for the short term future. However, with signs of a 'pick up', there is still much potential for growth in the next five years and more.

Pipeline and control line installations have mirrored the trends of the greater offshore oil and gas industry; indicative of their crucial use in the development of hydrocarbon reserves worldwide.

Infield expects pipeline and control line capital expenditure to exceed US \$269bn over the next five years. This equates to 79,799km of lines, of which 55,900km will be pipelines and 23,899km will be control lines. Combined, pipeline and control line installations are expected to see relatively steady growth in the next five years, equating to a compound annual growth rate (CAGR) of over 6%. The previous five years did not see such a high growth – predominantly effected by the downturn. A global pick-up is expected, however in some cases extended growth is different depending on the market sector, field developments and energy requirements of each region.

The SURF market sector is expected to overtake the conventional line market in the forecast period for the first time. The significant growth in the SURF market is driven by a number of large regional developments, including long subsea gas tiebacks in North West Australia, deepwater block developments in Angola, flexible installations in the pre-salt basins of Brazil and numerous subsea to shore lines in Asia and Europe. Whilst this growth is indicative of the industry's trend to discover and develop deeper water reserves, the shallow water developments still hold potential. This is highlighted by the continued strength of the conventional pipeline installation market, all be it at slower growth rates than that of the SURF market.

The trunk/export lines sector will represent the highest percentage growth rate amongst all sectors. Whilst this growth characterises the increasing global demand to diversify the location and type of energy supplies, installation of trunk lines is highly dependent on a number of political, environmental and economical factors. As such, trunk/export lines represent the most volatile section of the pipeline market, and will likely be the most widely affected by the global downturn and the subsequent 'pick up'.

Control lines represent just 30% of the installation market in the forecast period. Growth in this market is mainly attributable to an increase in umbilical installations. Additionally, growth in power lines will begin to influence the market; including lines which are directly associated with the production end of the offshore oil and gas industry and the inter-regional distribution of the power it generates.

For more information please see the **Global Perspectives Pipelines & Control Lines Market Update Report To 2014**.

Who is buying the Market Update Reports?

Organisations range from fully integrated oil companies, national oil companies, contractors, service and supply companies, manufacturers and industry consultants located in over 40 countries worldwide. The market forecast reports are used by senior management, industry and financial analysts and consultants for strategic decision making

Why you should buy this report:

- Infield's modelling process, OFFPEX, is based upon a unique "bottom up approach". The component by component, project by project process is robust and has a proven track record
- The report contains the latest information on the probable impact of the current economic circumstances on the offshore oil and gas sector
- Utilise the Infield five year forecast for strategic decision making
- It is an independent and up-to-the minute analysis of the offshore pipelines and control lines sector
- Appraise region by region, country by country and sector by sector capital expenditure and forecast installation lengths for each of the elements within the market

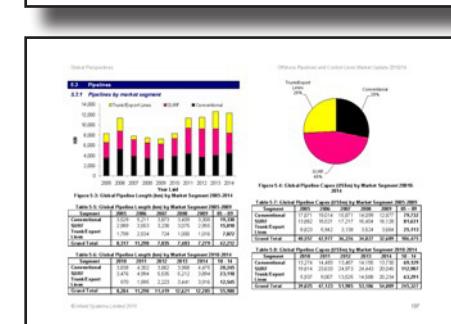
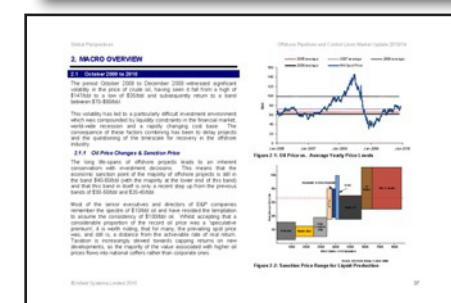
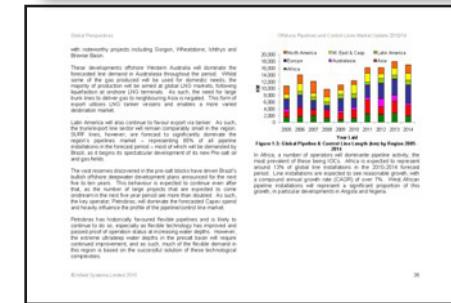
Report Contents

- Executive Summary** provides a comprehensive overview of the complete market sector
- Macro Overview** reviews the drivers behind the offshore oil and gas industry including recent oil price changes, the financial impacts on offshore activity, analysis of proved oil and gas reserves and oil and gas production, and the key game changers which could have short and long term impacts on the offshore market
- Sector Analysis** provides an in-depth review of key trends and drivers in the pipeline and control line markets. This section aims to highlight regions and specific sectors of activity and how they are influenced by regional factors, political influences and operator strategies
- Regional Forecasts** for each region (Africa, Asia, Australasia, Europe, Latin America, Middle East & Caspian and North America) analysis is provided by country, depth, material, diameter and market segment for pipelines and by country and type for control lines
- Sector Forecasts** looks more specifically at pipelines by sector (SURF, Conventional & Trunk/export lines) and type (Flexible & Rigid). Control lines are split by type and more detailed analysis of umbilicals by region, water depth and type is also provided
- Global Forecasts** provides a global overview by region for pipelines and control lines, individually and combined
- Appendices** provide case studies of major pipeline projects, each including maps produced by Infield's EnergyGateway Online Mapping & GIS System

GLOBAL PERSPECTIVES

Offshore Pipelines & Control Lines Market Update Report To 2014

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Purchasers of the Global Perspectives Pipelines & Control Lines Market Update will receive 12 months' free access to Pipelines Online. Pipelines Online lists major control line and pipeline projects being installed in the current year and four years forward. Details about each project include:

- Operators
- Project Name (Route)
- Product
- Type
- Weight Coat
- Length / Diameter
- Lay Type
- Vessel Type
- Water Depth

Major projects include; pipelines of 50Km in length and over; pipelines of 16" diameter and greater and 12.5Km in length and over; control lines of 25Km in length and over. (Please note that the report forecasts are for all lengths of control lines and all lengths and diameters of pipelines and flowlines, it is only the online data set access that is restricted).

Subscriptions can be upgraded to include other pipelines and control lines of all lengths and diameters or other data sets on the Infield Offshore Energy Database.

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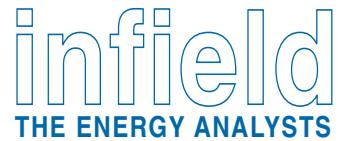
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INFIELD SYSTEMS LIMITED

TERMS AND CONDITIONS OF BUSINESS

1. DEFINITIONS

In these Terms and Conditions (including the Schedule attached) the following expressions shall have the following meanings:

- (a) "Charges" means charges payable to Infield by the Client in return for Infield providing the Service such Charges being as specified from time to time by Infield.
- (b) "Client" means the person, firm or company with which Infield enters into the Contract.
- (c) "Conditions" means these Terms and Conditions of Business.
- (d) "Confidential Information" means the terms of the Contract and all information (whether written or oral) concerning the business and affairs of Infield or the Client, or any other person, firm, company or organisation which is obtained or received as a result of the discussions leading up to, the entering into or the performance of the Contract and which is either designated as proprietary or confidential or by the nature of the circumstances surrounding disclosure ought to be treated as proprietary or confidential.
- (e) "Contract" means these Conditions and the Schedule attached together with any quotation provided to the Client by Infield relating to the provision of the Service.
- (f) "Contract Date" means the date on which the Contract is entered into, being the date on which Infield accepts an order from the Client for the provision of the Service.
- (g) "Infield" means Infield Systems Limited, a company registered in England and Wales, company number 02596007, whose registered office is at Suite 502, 1 Alie Street, London E1 8DE.
- (h) "Quotation" means the document issued to the Client by Infield that sets out the description of the Service that will be provided by Infield and the Charges that will be charged for the Service.
- (i) "Service" means the service or product which Infield will provide to the Client on a subscription or fee paying basis for the Term, the main features of such Service being set out in the Quotation and any special terms applicable to it being set out in the Schedule attached.
- (j) "Term" means the period commencing on the Contract Date and ending on the date determined under paragraph 5 below.
- (k) "Third Party" means any person, firm or company which is not Infield or the Client. For the avoidance of doubt any parent company, wholly or partly owned subsidiary company or associated company of the Client and any contractor or consultant engaged by the Client is a Third Party for the purposes of these Terms and Conditions and the Contract.

2. APPLICABLE CONDITIONS

- (a) Unless otherwise agreed in writing by Infield these Conditions shall override and exclude any terms or conditions stipulated, incorporated or referred to by the Client whether in any order or in any

correspondence or negotiations occurring prior to the Contract Date.

- (b) The commencement of the provision of the Service shall be deemed conclusive evidence of the Client's acceptance of these Conditions.
 - (c) Infield's employees and representatives are not entitled to commit Infield to provide the Service on terms differing from the specific provisions of these Conditions unless such employees or representatives are able to produce to the Client authorities so to do signed by a duly authorised director of Infield.
 - (d) The Client agrees with Infield that it will not, and that it will procure that any employee, agent or sub-contractor of the Client will not, directly or indirectly and whether alone or in conjunction with any other person, firm or company, during the Term and for a period of 12 months after the Term has come to an end for any reason, canvass or solicit the employment of or endeavour to entice away from Infield any employee or director of Infield with whom the Client had contact or with whom the Client dealt in connection with the provision by Infield to the Client of the Service.
 - (e) These Conditions and the Contract to which they apply shall be construed and applied in accordance with English law and the English courts shall have sole jurisdiction in any dispute relating thereto.
- ### **3. THE SERVICE**
- (a) Infield will supply the Service to the Client throughout the Term in consideration of the Client paying to Infield the Charges.
 - (b) The Client will provide such assistance as Infield may reasonably request to assist Infield to provide the Service to the Client and will appoint and notify Infield of a person to be the Client's authorised representative with whom Infield should consult in connection with the provision of the Service.
 - (c) The Client shall not use the Service for any improper or unlawful purpose and the Client shall comply at all times with the terms of the Contract. The Client will use the Service only for its own internal purposes and in any use of data derived from the Service the Client will ensure that its source is appropriately acknowledged. The Client shall comply with any reasonable instructions which Infield may from time to time issue relating to the Service.
 - (d) The Client shall not in any way reverse engineer, disassemble or decompile any data or any part of any data provided by Infield as part of the Service except to the extent and for the express purpose authorised in advance in writing by Infield
 - (e) The Client shall not pass on any part of the Service or any information or analysis derived from the Service to a Third Party without the express written authorisation of a director of Infield. If authorisation is granted to the Client for any part of the Service or for information or analysis derived from the Service to be passed to a Third Party, the Client undertakes to include
- the following reference, "Data source: Infield Systems Limited, London."
 - (f) Where the Service is supplied to the Client for one specific project it may not be used by the client for any other purpose or project without the express permission of Infield.
 - (g) The Client agrees that its use of the Service may be monitored and that Infield may terminate the provision of the Service forthwith by giving notice to the Client if the Service is found to be used otherwise than in accordance with the terms of the Contract and any instructions issued by Infield relating to the Service from time to time.
 - (h) In its provision of the Service Infield will exercise all reasonable care and skill but no representation or warranty is given as to the accuracy or completeness of any information supplied nor as to the availability of the Service at all times.
 - (i) Infield reserves the right to alter details of the Service at any time and will give as much notice to the Client as is reasonably practicable of any such alteration.
 - (j) The Client acknowledges that Infield provides the Service on a syndicated basis and that it will not be provided exclusively to the Client.

at the time, and unless otherwise specified, such rates and charges are quoted exclusive of delivery charges, bank charges, currency conversions and commissions, import duties, taxes or any other such charges, which are the responsibility of the Client.

- (c) Infield reserves the right to refuse the Client credit and demand payment prior to supply of the Service.

5. TERMINATION

- (a) Unless terminated under any other provision of these Conditions, the Contract shall continue in force unless and until terminated by either party by giving to the other party at any time not less than three months' notice in writing provided that in the case of the Service being supplied on an annual basis such notice shall expire on an anniversary of the Contract Date.
- (b) In addition to termination under any other provision of these Conditions, Infield shall be entitled to terminate the provision of the Service immediately by giving notice to the Client in the event that the Client has committed a material breach of the provisions of the Contract provided always that in the case of a breach which is capable of remedy Infield shall have identified the breach concerned and requested that the Client remedy it and the Client shall not have remedied the breach within the period of thirty days from being notified of the breach concerned.
- (c) In addition to termination under any other provision of these Conditions, Infield shall be entitled to terminate the provision of the Service where the Client undergoes a change of control within the meaning of section 416 of the Income and Corporation Taxes Act 1988.
- (d) Upon termination of the Contract any outstanding Charges must be paid in full forthwith by the Client to Infield.

6. INTELLECTUAL PROPERTY RIGHTS

- (a) The Client acknowledges and agrees that all rights, title and interest in the Service, all information supplied as part of the Service and all software and systems used in the Service are owned by Infield and nothing in the Contract shall confer on the Client any right of ownership of the Service, the information supplied or of any such software and systems.
- (b) Infield grants to the Client a licence during the Term to use information provided as part of the Service for the Client's own internal purposes only and subject to the limitations set out in the Quotation. Such Licence may be terminated by Infield at any time by giving notice accordingly to the Client.

7. FORCE MAJEURE

Infield shall not be liable for any failure of performance of the Service or for any interruption in the provision of the Service for any reason beyond Infield's reasonable control including but not limited to the failure of power supply, strikes or lock out, act of God, war, riot, explosion, abnormal weather conditions, fire, flood, government action, delay by suppliers, accidents, shortage of materials or labour, or computer failure.

8. LIABILITY

- (a) Save as expressly provided in these Conditions all warranties, conditions or other terms implied by statute or common law are hereby excluded to the maximum extent permissible by law.
- (b) Infield shall have no limit on its liability for death or personal injury caused by Infield's negligence or the negligence of any of its employees acting in the course of their employment or agents or sub-contractors acting within the course of their contracts.
- (c) Subject to paragraph 8(b) Infield shall have no liability to the Client in contract, tort (including negligence or breach of statutory duty) or otherwise howsoever and whatever the cause thereof for any increased costs or expenses, for any loss of profit, business, contracts, revenues or anticipated savings, or for any special, indirect or consequential loss or damage of any nature whatsoever.
- (d) Subject to paragraph 8(b) and notwithstanding anything contained in these Conditions, Infield's liability in contract, tort (including negligence or breach of statutory duty) or otherwise arising by reason of or in connection with the provision of the Service shall be limited to a sum equivalent to the Charges payable by the Client in the year during which such liability arises.
- (e) If in the course of the provision of the Service Infield provides forecasts or data of a forward-looking nature, Infield shall have no liability for the accuracy or completeness of any such data or forecasts.
- (f) In the case of the provision of the Service electronically the Client accepts responsibility for the compatibility of the Service with the Client's systems and at the Client's own risk.
- (g) In the case of the provision of the Service via the Internet Infield cannot guarantee Client accessibility 100% of the time.

9. INDEMNITY

The Client will indemnify Infield fully against all claims, losses, liabilities, costs (including legal costs) and expenses which Infield may suffer or incur as a result of any breach by the Client of its obligations under the Contract or as a result of any misuse of the Service by the Client.

10. CONFIDENTIALITY

Each of Infield and the Client shall keep confidential and not use without the prior written consent of the other all Confidential Information of or supplied by the other and shall not divulge the same to any third party except to the extent disclosure of the same is required by law or by any governmental or other regulatory body. Each of Infield and the Client will protect Confidential Information of the other with precautions at least as great as those taken to protect its own Confidential Information. The provisions of this paragraph shall not apply to any Confidential Information which is or becomes public through no fault of the party receiving that Confidential Information or was in the possession of the receiving party at the date of disclosure.

11. NOTICES

- (a) Any notice which must be given under the Contract must be in writing and may either be delivered personally or posted.
- (b) Notice given by post must be pre-paid and correctly addressed to the recipient company at its registered office.
- (c) A notice delivered personally is deemed served upon delivery.
- (d) A posted notice which complies with paragraph 11(b) above is deemed served on the second business day after the day of posting for UK domestic mail and on the fifth day after the day of posting for international mail.

12. GENERAL

- (a) Neither party shall assign or otherwise dispose of any part of its rights or obligations under the Contract without the prior written consent of the other.
- (b) The headings are for convenience only and shall not be used to interpret these Conditions.

THE SCHEDULE

Special Terms relating to the Service

1. DEFINITIONS

In this Schedule the following expressions shall have the following meanings:

- (a) "Account" means the registered login specifications for the Client's access to Online Services.
- (b) "Advertisement" means any copy, artwork, illustration, image, words, and/or electronic file promoting the Client's own products and services that is allocated space in or on Infield's websites, printed materials and/or electronic documents.
- (c) "Analytical Services" means bespoke work carried out by Infield Analytical Services team.
- (d) "Data Purchase" means the purchase of an annual subscription to Online Services inclusive of updates.
- (e) "Data Lease Purchase" means the purchase of annual subscription of inclusive of updates for a Term of four years, where the cost of Data Purchase and updates over the four years are split into four equal annual payments.
- (f) "Data Lease Purchase Contract" means a contract between Infield and the Client for Data Lease Purchase.
- (g) "EnergyGateway" means the Internet based mapping and data service located at <http://www.offshoreenergygateway.com>.
- (h) "FileShare" means the Internet based file sharing service located at <http://www.infield.com/fileshare>.
- (i) "InfieldLive" means the Internet based data service located at <http://www.infieldlive.com>.
- (j) "InfieldOnline" means the Internet based data service located at <http://www.infieldonline.com>.
- (k) "Login" means the act of entering a User's unique email address and unique password to Online Services.
- (l) "Online Services" means services accessed through the Internet provided by Infield including but not exclusively restricted to

- InfieldOnline, InfieldLive, EnergyGateway and FileShare.
- (m) "Publication" means a printed document or electronic file published by Infield.
- (n) "Timescale" is the period of time in days and/or weeks for a Service to be completed from the agreed start date.
- (o) "User" is the named individual with a named and unique email address who is permitted access to the Client's Online Services Account.
- 2. DATA & ONLINE SERVICES**
- (a) Prices quoted for Online Services and Data are valid for 30 days from the date of the Quotation. Thereafter Infield reserves the right to vary the price at its discretion.
- (b) Infield reserves the right to withdraw any Quotation at any time.
- (c) All quotes are strictly for a single site three user licence unless otherwise agreed.
- (d) Clients opting for Data Lease Purchase will be deemed to have entered into a contract for a term of four years under which the Client will be invoiced on each anniversary of the Contract Date.
- (e) Data Lease Purchase Contracts can only be terminated by the Client paying the balance for the standard purchase of the database or data sets plus the updates since the Contract Date.
- (f) A Client terminating a Data Lease Purchase Contract prior to the fourth anniversary must remove all Infield Data from all servers, hard disk drives, disks, internets and intranets and any other electronic storage system now known or hereafter invented and confirm by Notice to Infield that they have done so.
- (g) For updating of Data and Online Services, renewal invoices are issued prior to the annual anniversary of the Contract Date. To terminate such a contract the Client must give notice to Infield within 14 days of receipt of the renewal invoice.
- (h) Infield reserves the right to change the Online Services at its discretion. Any such change will be notified to the Client.
- (i) The Client agrees that each User of its Online Services Account will be registered and will be issued with the User's own unique password and use the User's unique email address which is the registered domain of the Client as the User's user name.
- (j) The Client agrees that each User is subject to Infield's Terms and Conditions of Business and logging on to Online Services is acceptance of Infield's Terms and Conditions of Business.
- (k) Each User must maintain the confidentiality of the User's password and will not pass it on to any Third Party or to any other individuals or employees in the Client's organisation.
- (l) The Client will appoint one User as the "point of contact" for their Online Services Account. In the event the Client does not nominate an individual then Infield will do so.
- (m) In the event a User believes that his password is known by others he must inform either the Client's point of contact or Infield immediately via electronic mail and new codes will be issued.
- (n) It is the responsibility of the Client to inform Infield of any changes to the list of registered Users and of any misuse of Online Services.
- (o) The Client has the right to cancel the Online Services at any time prior to the point the unique password is used to login to the Online Services, after which the Service is deemed to have started. Due to the nature of the Service the Client cannot cancel Online Services after this point.
- (p) For any Service sent via electronic mail the Service will be deemed to have started as soon as the files have passed through Infield's email exchange.
- (q) Infield reserves the right to cancel Online Services at any time by giving notice accordingly to the Client. In this event Infield will refund the proportion of the remaining subscription paid in blocks of one day.
- 3. ANALYTICAL SERVICES**
- (a) Prices quoted for Analytical Services are valid for seven days from the date of issue. After seven days Infield reserves the right to resubmit a Quotation.
- (b) Infield reserves the right to withdraw any Quotation at any time.
- (c) Timescale is an estimate only and is dependent upon the start date, any existing work/holiday commitments of Infield personnel engaged in the provision of the Service, the availability of any external individuals for interview and delivery of any agreed items by the Client.
- (d) Charges exclude any travel, accommodation and communications expenses, which will be recharged at cost plus a percentage surcharge as set out in the Quotation. Charges also exclude any items of data bought-in from external sources for the work.
- (e) Infield will seek prior approval from the Client for expenditure exceeding £200 on any re-chargeable item in 3(d) above.
- (f) Payment terms are that Charges and expenses will be invoiced at 50% upon receipt of order and the remaining 50% upon delivery of the final report.
- 4. ADVERTISING SERVICES**
- (a) All advertising is offered on a first come first served basis and is subject to Infield's approval.
- (b) Infield reserve the right to refuse to publish an Advertisement.
- (c) Advertisements must conform to the British Code of Advertising Practice and must accurately reflect the product and/or service being advertised.
- (d) All claims, and statements made in Advertisements must be supported by appropriate evidence and such evidence must be made available to Infield upon request.
- (e) The Client warrants it has the right to publish the contents of the Advertisement, without infringement of any rights of any third party including, without limitation, intellectual property rights.
- (f) The publication of an Advertisement by Infield does not constitute endorsement of the Client, its products or services.
- (g) Space reserved by the Client must be paid in full where the Advertisement is not published due to an act or omission by the Client.
- (h) Infield will not be liable for any loss or damage caused by amendment, error, late publication or non-publication from any cause whatsoever.
- (i) Infield will not accept liability for any error on the part of third parties or inaccurate copy instructions.
- (j) Infield reserves the right to publish the most appropriate copy should copy instructions not be received by the stipulated time.
- 5. PUBLICATION SERVICES**
- (a) Publications will be despatched within 24 hours of receipt of payment if in stock.
- (b) In the event of an item ordered being out of stock, Infield will inform the Client of the lead time for delivery.
- (c) In the unlikely event that an item is damaged when the Client receives it Infield will replace it at no additional charge.
- (d) Due to the nature of Infield's publications once the publication has been despatched no refund can be made.
- (e) Infield reserves the right to despatch Publications only upon receipt of payment in full.

27 April 2009