

CONTENTS

Overview 2

Chapter I:

Global coverage matched with local knowledge 4

Expanding production into emerging markets 4

Development of remote sites 4

The role for integrated suppliers 6

Chapter II:

The business view of supply chain management 7

Driving the competitive advantage 7

Inventory optimization 8

Transportation solutions 9

Chapter III:

A trusted partner, not another provider 10

The drive for external expertise 10

From provider to partner 10

Vendor rationalization 11

End-To-End Supply Chain Management 11

Chapter IV:

Safety and compliance as on-going priorities 12

Safety First 12

HSSE management on site 12

Compliance metrics for improved supplier performance 12

Understanding regulatory implications 13

Counterfeiting of parts 14

Conclusion 15

Imprint 15

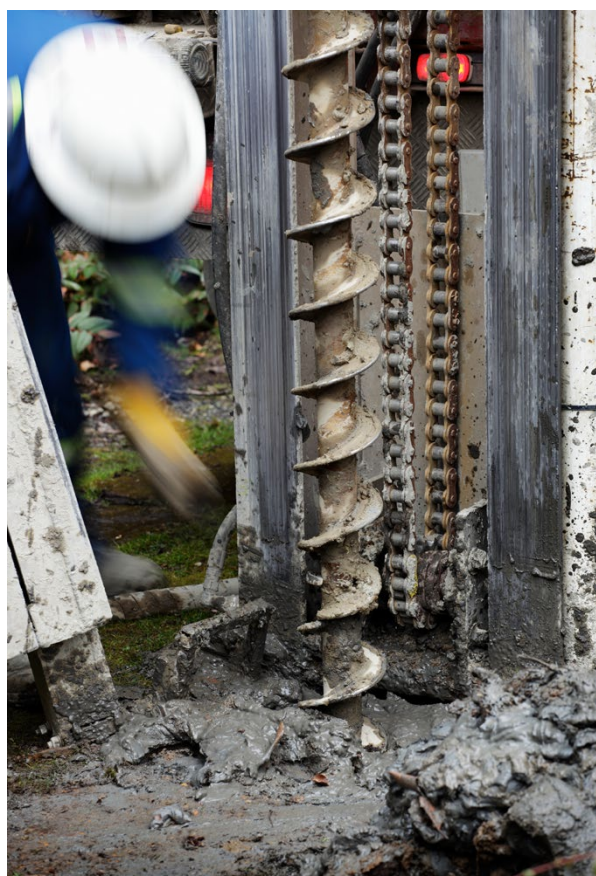
OVERVIEW

In this paper, we explore some of the challenges and opportunities that have presented themselves to the energy industry over the past year, which in turn define the type of integrated suppliers which businesses want to work with. Firstly, energy professionals need to partner with integrated suppliers who can offer them global coverage but also in-depth local understanding. Secondly, they seek better visibility of end-to-end supply management while also addressing the downward pressure on costs. Thirdly, they want to reduce their overall vendor base while simultaneously investing in more external expertise. Finally, they have concerns that safety and compliance standards will not be adhered to if more MRO work is contracted out, while being aware that they do not always have adequate metrics to evaluate safety performance. The onus is therefore on integrated suppliers to show that they can meet each of these concerns head on and add substantial value to client businesses.

The past year has brought exceptional challenges for upstream and downstream Maintenance, Repair and Operations (MRO)¹ professionals in the energy industry and it looks unlikely to get any easier in the years to come. Fluctuations in demand, together with price volatility, have forced companies to look for ways to reduce costs. This has led to more sourcing of supplies from low-cost locations. At the same time, production has moved to areas that are more remote, difficult to support and unfamiliar. This transition has increased the complexity and extended the length of the materials supply chain.

In addition, the days of “easy” oil are coming to a close. Some estimates suggest that conventional oil production is declining by 5 percent per year. Thus companies are considering extraction from

¹ This report defines MRO as all indirect material that supports preventative, break/fix, scheduled maintenance, turnarounds and small capital projects.



unconventional sources, such as the Canadian oil sands, shale or tight gas sites in politically challenging environments such as the Middle East, North and East Africa and North Asia. The next phase of extraction has meant that energy businesses are expanding into unfamiliar markets, where they have limited pre-existing networks to handle their supply chain. In addition, they are utilizing new technologies which in turn bring new challenges and increase demand for new, efficient, cost-effective supply chain practices. These practices extend beyond the conventional in-bound supply chain for pipe and OCTG, to include water supply, proppant delivery, transportation of cements and muds, waste water and tailings disposal etc.

“Easy oil has disappeared. We need to have larger projects for the more difficult stuff. Having all the proper back-up documents and certifications that accompany various equipment – that’s increased a lot. Again, I would say that’s really tied to the increasing complexity of projects, as the types of materials we use now are very different, with oil sands and offshore, than ten years ago.”

Head of Materials Management, Energy, Americas

To better understand and assess the priorities and concerns in this evolving energy environment, DHL interviewed industry experts and oil, gas and mining professionals (upstream, midstream and downstream) in procurement, supply chain and materials management roles. This paper brings together key insights from North America, Europe, the Middle East and Asia Pacific.

Our key finding is that oil and gas business now see a strong role for integrated suppliers to play in assisting them with delivering end-to-end supply chain management. Fundamentally, customers want to rely more on integrated suppliers as they do not feel that they have the required in-house expertise to meet the challenges of new markets and remote territories. We outline four key needs – sometimes inherently contradictory – that integrated suppliers seeking to service this industry must be ready to adapt to.

CHAPTER I: GLOBAL COVERAGE MATCHED WITH LOCAL KNOWLEDGE

As energy companies move into the next phase of oil and gas extraction, they are entering new markets and developing remote site locations. This drives a need for external assistance for indirect materials management. Integrated suppliers offer an expansive international presence for the new supply chain as well as local knowledge to form effective partnerships.

Expanding production into emerging markets

Since 2005, when global production of regular crude oil hit a ceiling of 72 million barrels a day, supply has struggled to keep pace with rising demand.² As the need to locate new extraction sites increases, many companies are moving their sites to emerging markets and sourcing new basins with conventional and unconventional oil. The next phase of oil and gas extraction means that complicated, expensive new processes (such as extraction from oil sands and hydraulic fracturing of shale rock) are being undertaken in countries where companies have limited presence or lack prior experience. As a result, local support networks that manage the indirect material supply chain processes have little experience and limited functional resources.

Not all energy production is shifting purely for reasons relating to extraction. European downstream customers discuss feedstock cost as a key driver for moving refineries and petrochemical plants (for example, for fuels, lubricants, solvents and polymers) overseas, with Asia Pacific and North America identified as locations for future growth in production. Others say they are using offshore sites more and more, or a mixture of both onshore and offshore in their supply chain, adding further complexity to

indirect material management. Anecdotally, upstream customers tell us that capital has been earmarked for investment in Queensland and unfamiliar regions of Vietnam and China, while Myanmar is a longer-term option for both onshore and offshore projects.

“Some of the focus of our manufacturing business will move from Europe to the USA, where we have some low cost shale gas feed-stocks. We are also seeing big growth in Asia Pacific. We will look to solve logistics in the USA and Asia Pacific rather than Europe in the next few years.”

Sourcing Adviser, Oil and Gas, Europe

Development of remote sites

Many energy companies are expanding into remote sites in their home countries, which brings a new set of requirements and associated head-aches. There are differences by geography and there are also common challenges, but, above all, such sites are expensive to service well. Transportation is often difficult as a consequence of underdeveloped roads or a lack of infrastructure. This often means a heavy reliance on domestic trucking by local sub-contractors, which has associated HSSE implications that must be monitored. In addition, STEM graduates, already in short supply, are often not within commutable distance, forcing companies to compete aggressively for staff. In North America, remote sites mean sourcing must initially come from local providers, rather than suppliers who are able to offer customized solutions. Such local supplies are usually priced at a premium, leaving customers out of pocket and missing out on the economies which aggregation of demand can bring.

By contrast, in Saudi Arabia, local supplies are so limited in availability that some downstream customers say they are forced to rely exclusively on

² Murray and King, “Oil’s tipping point has passed”, Nature Magazine, Vol. 481, 26 January 2012



imported materials. One company discusses sourcing 90% of raw materials from overseas vis-à-vis trusted suppliers from North America, Australia and Asia as items such as gaskets, wire ropes and slings are simply unavailable. Only machinery-specific items (such as switch gear, bearings etc.) and generic material groups (such as protective wear) are purchased from local distributors. This can result in significant delays as companies wait for government clearance.

“We have a heavy reliance on imported materials and the regulatory processes to import these materials are quite exhaustive. It can take a considerable amount of time to clear a relatively simple import of materials or spare parts. We’ve waited up to five months to get clearance for these materials, because they have to go through several Saudi Government departments.”

Supply Chain Director, Mining, Saudi Arabia

The role for integrated suppliers

Expansion into emerging markets has resulted in a more multi-national, fragmented supply chain. Most energy businesses readily admit that they do not have access in-house to the skills or systems required to meet these challenges, driving interest in delegating such responsibilities to external experts. Integrated suppliers (also known as Third Party Logistics Providers or 3PLs) therefore have a critical role to play in helping energy companies meet the challenges of entering emerging markets and servicing remote locations in a cost effective and efficient way.

Partnering with an integrated supplier who can offer global coverage is part of the solution. To keep ahead of lead times for large-scale projects, companies have to think about making the right purchasing decisions well in advance. They need to be able to source in a cost effective way from low-cost countries for projects overseas or at distance from remote sites. They will have to organize cross-border transportation as well as monitor regulatory requirements across multiple markets, to ensure they are meeting Health, Safety, Security, and Environment (HSSE) standards. Investment in compliance software and skilled personnel, capable of overseeing strict adherence across multiple countries, are therefore pre-requisites for expansion into new markets.

“The influence [of the supply chain] is big and growing, owing to the increasing complexity of our projects. Historically, particularly in Canada, we had a simple business so a lot of it was just bought off the shelf from local suppliers. As we do more complex projects, it’s been a lot more global sourcing, a lot more value.”

**Inventory and Supplies Manager,
Upstream Oil and Gas, Canada**

Global coverage must also be matched with in-depth local expertise. In the Middle East, for example, it is particularly important for integrated suppliers to understand the dynamics of the market in which their customers operate. A relatively closed commercial environment requires integrated suppliers to be well connected to stand a chance of being successful. Local distributors in Saudi Arabia, for example, tend to operate as monopolies within their corner of the market, by latching on to the manufacturers of certain products. The major partner of an integrated supplier should therefore be a Saudi company. In addition, local hires are integral to being able to interpret and resolve regulatory issues quickly as they arise.

“[An integrated supplier] can’t just come to Saudi Arabia and put up a sign saying they’re open for business. The value add would be in taking over all distributorships here and setting up supply chain to bring all supplies into the country, and then setting up a delivery network to take these products to your customers.”

Supply Chain Director, Mining, Saudi Arabia

CHAPTER II: THE BUSINESS VIEW OF SUPPLY CHAIN MANAGEMENT

Production is more expensive and the internal environment is tougher than ever, with more senior management scrutiny on spend. Optimization means taking a business view of supply chain management that puts higher efficiency and productivity as the objective of every process, while maintaining standards in health, safety, security, environment and compliance. More robust metrics, inventory optimization and transportation solutions are critical to reducing costs, improving utilization and increasing competitiveness.

Expensive extraction technology and production techniques mean higher production costs for upstream customers, while rising costs of raw materials and volatile demand have placed significant downward pressure on profit margins. Customers tell us that senior management teams are now more

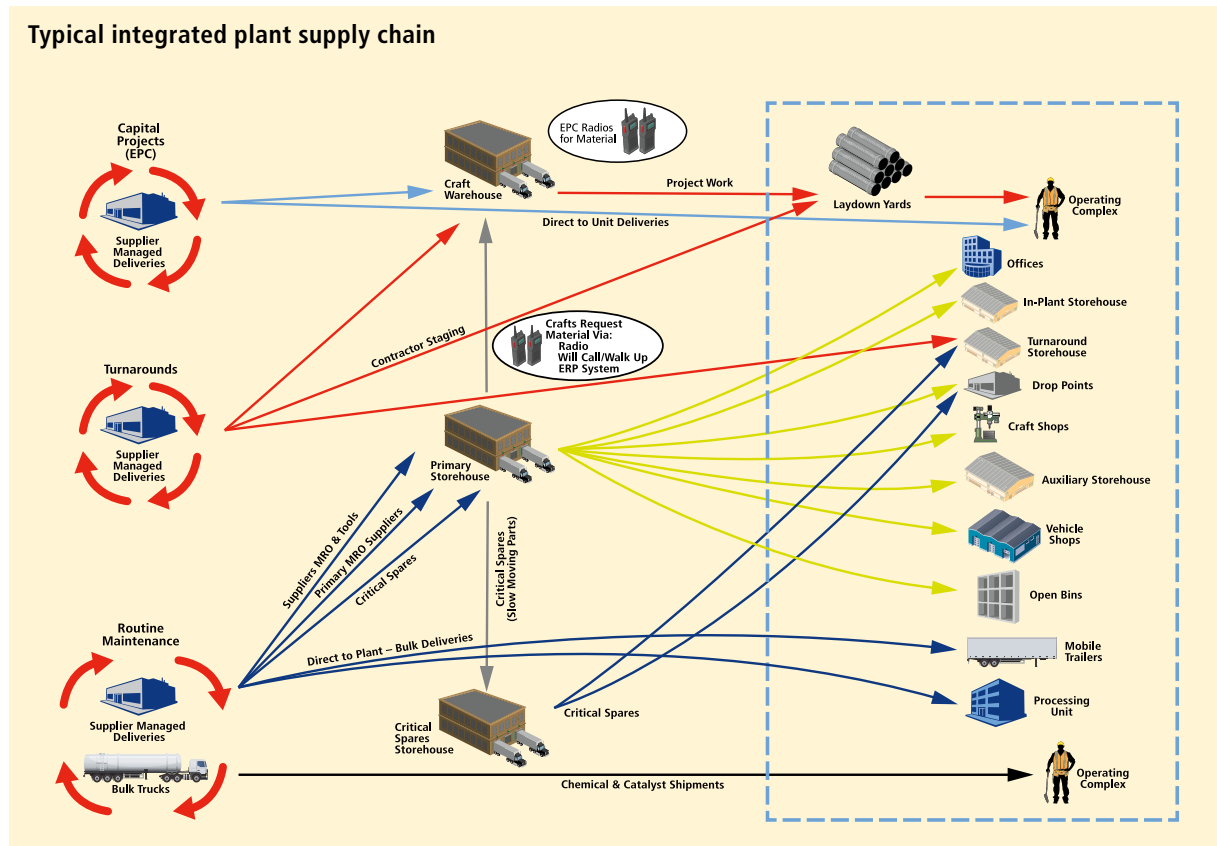
focused on consolidating business spend – they want evidence of where costs are coming from and proof that waste is being eliminated in the supply chain and that productivity is being improved. These trends make it more important than ever to have an optimized supply chain.

“Right now, there is a greater focus on cost, due to a higher Australian dollar, low price of coal, and decreasing demand from China.”

Supply Chain Manager, Mining, Asia Pacific

Driving the competitive advantage

Customers already have some metrics in place to give them a picture of operations (for example,

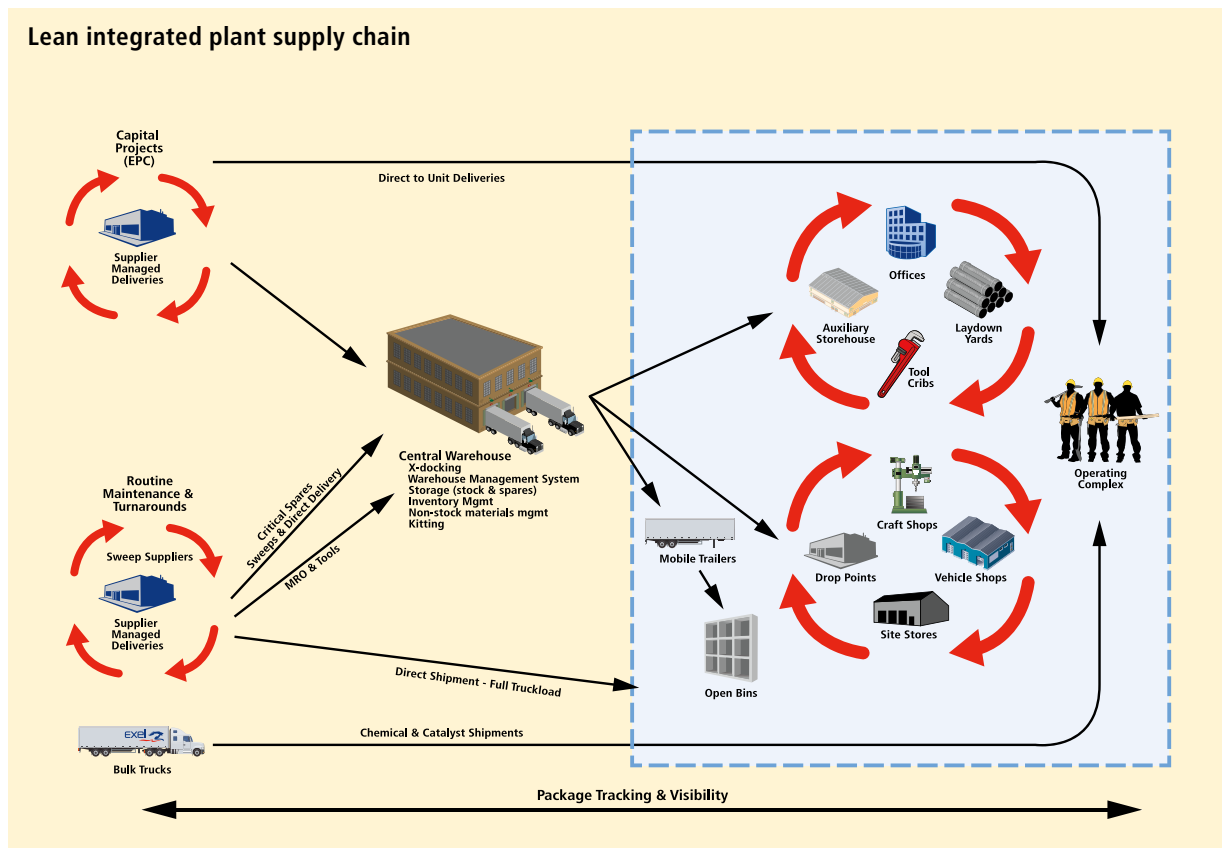


time on tool, asset availability, on-time delivery and number of stock-outs). However, most worry that they are currently only getting part of the picture, rather than the end-to-end view of supply chain effectiveness which they require. Stronger Key Performance Indicators (KPIs) are required to establish the cost effectiveness of different parts of the supply chain, so that weak points can be identified and productivity improvements made. The data that such metrics provide should feed directly into supply chain processes, facilitating better ordering and maintenance planning. Accurate, up to date material masters enable automated materials replenishment from physically issued orders, preventing overstocking and overbuying. Planning managers can move maintenance jobs into the schedule based on accurate estimates of delivery times rather than waiting until

the delivery actually happens. Having KPIs and robust data drives a competitive advantage, helping companies to reach their performance goals. However, the provision of accurate KPI data, together with the full visibility and traceability of materials across the supply chain, can only take place if issues of supply chain fragmentation are addressed and standardization of systems and processes is implemented.

Inventory optimization

There are two main challenges referenced in relation to inventory management. Firstly, downstream energy professionals are concerned that poor cataloguing means they do not have a good understanding of their current inventory either locally or globally. Customers



with international operations comment that sites and warehouses were accumulated over time through mergers and acquisitions, resulting in different cataloguing systems being used in different countries. In addition, non-installed spare parts are ordered as part of capital project implementation processes, increasing product complexity and hence inventory levels. The same parts can be referred to by different descriptions, rendering it extremely difficult to know what inventory really looks like across the board.

“The issue of cataloguing is a global problem, until recently each country did its own thing. Our cataloguing is such poor quality that we can’t say, with certainty, that we have the same pump in all our different warehouses.”

Sourcing Advisor, Oil and Gas, Europe

Secondly, energy professionals are now looking for ways of optimizing their inventory, having become aware of just how much over-buying they have done in the past. Suppliers may have their own payroll motivations for when transportation is scheduled. If they control freight, they prefer to have no delivery date, which results in warehouses becoming overrun with materials. On-time delivery is also a concern, particularly when outsourced to a vendor or a distributor, as sites sometimes lose visibility and control of their MRO materials and costs. This approach can also impact on health and safety, increasing plant congestion and the opportunity for an incident.

“We need help getting the best value from our inventory and making sure that we don’t exceed the optimum.”

**Head of Material Management, Oil and Gas,
Saudi Arabia**

Delegating single-point responsibility to an integrated supplier for inventory optimization can help customers meet their inventory goals. Firstly, they can bring a differentiated approach to a business’s material stocking strategy. Controlled access would be offered to higher value parts, while uncontrolled access (for example, free issue bins at the point of use) would be introduced for low-cost, high-volume materials that are quick-moving. Moreover, inventory optimization directly impacts on how successfully managers are able to meet wider business objectives. This allows for a just-in-time stocking strategy that ensures savings associated with labor and inventory. Eliminating redundancies in the inbound flow of materials, suppliers and equipment should mean inventory and overhead costs drop by 15 to 20%. In addition, it is worth noting that the implementation of a robust inventory optimization approach can release large quantities of inventory for immediate use – so realizing a substantial first year cash saving – a useful benefit in these cost-focused times.

Transportation solutions

Strategically located cross-docks or consolidation warehouses can act as integration points, so that material handling activities (such as receiving and priority sortation) are moved off-site to consolidate orders and reduce deliveries. Partnerships with other groups may be necessary so that supplies are effectively transported from sellers to cross-docks and then on to relevant production areas for distribution to end users (for example, warehouses, tool stores, site stores, etc.) Having these solutions in place will help clarify the supplier pick-up schedules and provide ultimate oversight to the client of how the supply chain fits together. It should also bring down transportation and logistics costs – with a particular focus on the reduction in emergency response deliveries (or hot shots).

CHAPTER III: A TRUSTED PARTNER, NOT ANOTHER PROVIDER

As indirect material management becomes more complex, energy customers want external expertise. Simultaneously, they want simplicity and standardization. Integrated suppliers should assist with vendor rationalization and provide end-to-end supply chain management if they want to be perceived as valued partners, rather than as just another provider.

The drive for external expertise

More complex projects, lengthier supply chains, more global sourcing – energy customers across the world acknowledge that the challenges associated with the new supply chain necessitate higher investment. Faced with a choice between acquiring and training up staff in-house or partnering with an integrated supplier to take on indirect material management for them, many prefer the latter option as they feel that understanding MRO is not core to their business and a sub-optimal use of valuable resources. Yet there is a complicated dynamic to all this. On the one hand there is a desire to acquire more external expertise, but simultaneously customers admit to being averse to hiring more providers to help them with MRO.

“We have an enormous tail of thousands of suppliers because of the way specs are written. We need to rationalize.”

Supply Chain Manager, Mining, Asia Pacific

Three concerns stand out. Firstly, energy customers already feel as if they are dealing with too many vendors. Legacy relationships have been allowed to continue, even while new Supply Chain Managers join the business and bring their preferred buyers with them. Customers worry that handling too many supplier relationships is time-consuming and distracts their attention away from core tasks. Secondly, having more vendors means there is

fragmented control, poor data inter-change and hence limited visibility of activity across the seller base, which renders optimization of supply chain processes difficult. Finally, having too many suppliers makes it challenging for companies to monitor and control compliance and safety standards across global operations (see Chapter IV).

“We prefer to work with integrated suppliers as this is not a core business for us. There are some drawbacks, however. We feel we are losing control over our supply chain if we outsource completely.”

Logistics Manager, Oil and Gas, Europe

From provider to partner

There is an important role for integrated suppliers to play as partners to the energy industry. One part of that role involves helping customers to identify the most effective vendor relationships and terminate surplus ones. Providing businesses with a data-base of KPIs on vendor performance can assist with these decisions. Another factor is being able to offer visibility of end-to-end supply chain management and full traceability of materials, including accurate documentation. A final consideration is the need to demonstrate and prove to energy customers that integrated suppliers have industry expertise which may be tailored appropriately to the job at hand. Whether that's understanding industry terminology or being able to adapt seamlessly to the safety culture on-site, customers need reassurance that their supply chain is in safe hands. Only then can integrated suppliers become partners, not just providers.

“Supply chain, from manufacturing to receiving, would ideally be done by one outsourcer. That would reduce the efforts we have to make. And then we could concentrate on critical materials.”

Supply Chain Manager, Oil and Gas, North America

Vendor rationalization

A true partner must play a leading role in reducing and simplifying existing vendor relationships on behalf of customers. Identifying high-performing suppliers is the first step in this process, which means feeding customers the metrics they need to better judge true seller performance and hence rationalize the supplier base and improve materials management. Robust evaluation criteria should ideally give customers a comprehensive overview across multiple areas, including the quality of products supplied, the reliability of supply (for example, paperwork, packaging materials), timeliness, accuracy and safety. Having this data will help determine which contracts to terminate and which to keep and improve overall supplier performance, as it becomes clear that commitments are being monitored.

“We are currently working with our integrated supplier to do a lot more with fewer strategic suppliers. We have rationalized our logistics suppliers to form a logistics solution.”

Enterprise Category Manager, Oil and Gas, Europe

End-To-End Supply Chain Management

A fragmented supply chain effectively means no one is responsible for having the overview. Vendors end up controlling discrete parts of the supply chain and only fulfilling responsibility for their part. No one is focusing on what’s best for the customer more

holistically, looking across all sites and all stages of the supply chain. For example, there is often a tendency to expedite materials that are urgently required, even though this is extremely expensive. By contrast, having an integrated supplier would mean one firm is accountable for overall supply chain performance. The focus therefore turns to building existing capacity, addressing asset constraints and improving planning to avoid premium freight.

Similarly an integrated supplier can take on sole responsibility for supplier management. Systems can be introduced to ensure traceability, reducing the risk of clients being left without essential materials. Materials are often not delivered on-time with reasons ranging from bad weather, lack of transportation to failure to send the Purchase Order. Suppliers would be given a user-friendly online tool to schedule jobs. End-to-end traceability shows where an item is picked up, where it moves in the supply chain and where it is eventually delivered. And in the event of a delay or issue where materials will not be delivered in time, integrated suppliers would be tasked with finding an alternative solution at an acceptable cost

CHAPTER IV: SAFETY AND COMPLIANCE AS ON-GOING PRIORITIES

Safety and compliance are paramount within the energy industry globally, yet many customers are worried that contractors will not maintain the same high standards that they expect from their own staff on-site. In actuality, integrated suppliers can introduce standards, systems, processes and metrics that raise the safety and compliance performance of vendors across the board to meet or exceed those of the client organization itself.

Safety First

When asked to name their top business priorities, energy customers repeatedly cite safety and compliance. Established Health, Safety, Security, and Environment (HSSE) policies and procedures are religiously adhered to as they ensure that all staff are well-looked after on-site, that secure access is only granted to authorized personnel and that up-time is guaranteed. At the same time, customers worry that they do not have precise means of ensuring that their contractors (and their associated tiers of sub-contractors) are keeping to the same rules.

HSSE management on site

“It’s difficult to get TPVs [Third Party Vendors] to operate within [our] compliance rules and regulations. We’ve had some serious problems with that.”

Strategy Manager, Upstream Oil & Gas, Americas

To overcome clients’ wariness about loss of control over safety standards, integrated suppliers will need to demonstrate a continuous focus on in-plant and off-site safety, across both personnel management, sub-contractor management and equipment. All staff contracted by client businesses must have up-to-date certifications and should be with organizations that demonstrate a strong commitment to safety.

FCPA and HSSE compliance training is essential for engaging employees and managing supply chain compliance. Specific training should be introduced for transportation safety, focusing on vehicle checks, identification of hazards to reduce collisions and strategies and tactics for load securement. For remote sites, where road quality is variable or poor, journey management will be needed to prevent and reduce common incidents. Equipment will need to be standardized across plants in different locations. Regular safety meetings should be scheduled to escalate any HSSE issues to the appropriate level and ensure that cross-learning between sites and contracts is actively encouraged and rewarded.

Compliance metrics for improved supplier performance

Fewer than half of respondents in a recent research study say that they have any compliance management metrics in place, such as spend integrity or accuracy, supplier commitments or scorecards and compliance reviews or audits.³ An absence of robust compliance metrics has two impacts on the new multi-national supply chain. It makes it difficult for energy professionals to know for sure that standards are being guaranteed across their global operations. It also makes the task of evaluating supplier performance on HSSE nearly impossible. Unsurprisingly, customers are reluctant to take the risk of working with integrated suppliers on an end-to-end basis for precisely that reason. Where they do select suppliers, they will rightly scrutinize their past record closely.

Metrics to monitor, assess and improve compliance performance should be part of every supplier

³ Indirect procurement: too many missed opportunities, Institute for Supply Chain Management, November 2010, p.38



relationship and, where introduced, have a positive impact on performance. Visible leadership is required, so that those responsible for HSSE and compliance at the highest levels are clearly accountable. Active employee engagement at all levels is important for fostering a culture of compliance. Ongoing assessment of personnel HSSE capabilities is part of the process of making compliance part of all employees' day job. In addition, auditing is a necessary measure to ensure compliance standards are being adhered to.

“We will generally look at the record for lost time on accidents when selecting an integrated supplier. We must ensure that contracts have implemented safety management systems and would want KPIs around safety and health.”

Logistics Manager, Oil and Gas, Europe

Understanding regulatory implications

For North American customers, an important attribute in an integrated supplier is having a

thorough knowledge of the regulatory environment and its implications for the energy industry. For example, the U.S. Environmental Protection Agency (EPA) issued a series of regulations required under the Clean Air Act to reduce air pollution from the oil and natural gas industry. These regulations will mean new standards for emissions of toxins and result in technology reviews every eight years as well as increased oversight of industry standards in equipment. Customers expect their partners to assess the impact this regulation will have and suggest solutions for how to adapt.

By contrast, in the Middle East burdensome regulation is less of a problem than the difficulties of border-crossing and the fast-changing nature of legislation. Integrated suppliers need different skills compared with the U.S. where the policy environment is more stable. They must demonstrate a detailed understanding of customs clearance and export laws at different stages of the supply chain, including global procurement, transportation and delivery. They will need to understand which duties are relevant



to indirect materials management and plan for unexpected eventualities. This may mean having the right contacts in Government departments to prevent delays to delivery.

“We’ve had a product thrown under the regulation of the Food and Drug Authority – we had to go through a whole lot of processes and found ourselves negotiating between numerous Government departments. In some ways, you’re surrounded by less regulation but that can be a curse... New regulation is introduced at short notice with no consultation.”

Supply Chain Director, Mining, Saudi Arabia

Counterfeiting of parts

Having a longer, multi-national supply chain certainly has its advantages – more cost-effective global sourcing being among them. However, it also means there are more inputting suppliers and accordingly a higher risk of counterfeit. Industry experts comment that non-compliance of parts is a common supply chain

challenge in other industries and can seriously impact the quality and delivery of the product to the end user (particularly in the luxury goods and pharmaceuticals industry). However, non-compliant parts are now a growing concern for energy too with counterfeit spare parts of inferior quality appearing in the market place and compromising the safety-critical environment of oil and gas operations. This demands robust product traceability at item or batch levels from supplier to site – easier to achieve if the supply chain is managed on an integrated, end to end basis by a single service partner.

“Industry is concerned about the safety of the supply chain and counterfeiting is a big part of that. Being able to track where parts are going helps identify where tampering is happening in the supply chain and plan where there is a serious risk of counterfeiting occurring.”

Independent consultant, Americas

CONCLUSION

The major developments currently taking place in the energy industry mean it is more important than ever for businesses to form effective partnerships with integrated suppliers, who bring true expertise to the management of indirect materials. As businesses expand into unfamiliar markets and are forced to handle more supplier relationships, it becomes imperative to integrate their supply chain so that one party is responsible for end-to-end management, to standardize systems and ensure visibility of all processes. Not only would an integrated supplier monitor and ensure high standards of HSSE compliance are maintained by vendors across sites, they would also introduce more accurate data gathering and management to assess contractor performance, raising the bar across the supply chain. In turn, having access to more metrics on performance should allow for weaknesses within the supply chain to be eliminated and under-performing suppliers to be terminated, resulting in stronger cost control at a time of greater scrutiny on spend within departments. Partnering with an integrated supplier therefore means a simpler supply chain, more transparently managed and more easily controlled.



IMPRINT

FOR MORE INFORMATION

energy.sector@dhl.com

PUBLISHER

DHL Customer Solutions & Innovation
Energy Sector
Heinrich-Brüning Straße 5
53113 Bonn

IN COOPERATION WITH FRESHMINDS

In the development and generation of this paper, DHL was assisted by FreshMinds, a growth and innovation consultancy that uses research and data analytics to drive business strategies. FreshMinds conducted in-depth interviews with supply chain professionals, industry experts and internal stakeholders across North America, the Middle East and Asia Pacific to inform the content and development of this White Paper.



Version 1: October 2013

Cover illustration: © shutterstock.com/ Vextok

Photos: p. 3, 5, 13, 14 – © gettyimages.de

