Call to Order/Introductions (Bob Warren IADC): Introduction of Crown Center and purpose of the meeting, and welcomed everyone in attending the Supply Chain Meeting.

Safety Briefing (Steve Kropla IADC): Provided building and emergency response information.

Anti-Trust Guidelines (Ken Fischer IADC): Reviewed the Anti-Trust Guidelines hand-out and discussed the formation of this committee with regard to potential involvement of IADC Members located internationally. Emphasized the core of anti-trust law is the prohibition of business collusion, and that the actions of collusion have the effect of restrained trade. Other points are contained in the Anti-Trust Guidelines (attached to this summary).

In Attendance:
Jorge Lebrija   Ensco   Director, Global Resources
Tom Schexnayder  Ensco   Senior Director of Supply Chain
Rodney Barretto  Ensco   Supply Chain Manager
Adam Rogers   Helmerich & Payne   Sourcing Supervisor
Warren Rhone   Hercules Offshore   Catalog & Vendor Agreements Administrator
Mike Howard   Hercules Offshore   Director of Purchasing
Damon Flores   Maersk Drilling USA   Head of Purchasing Logistics
Brian Wolf   Noble Drilling   Vice President, Global Supply Chain
Mike Curtis   Pacific Drilling   Director of Global Services & Contracts
Greg Lahrman   Pacific Drilling   Global Logistics Manager
Wayne Mason   Patterson UTI   Director of Operations
John Espinosa   Rowan Companies   Supply Chain Director
Tim Kelley   Rowan Companies   Director Supply Chain Technology
Brian Stanley   Rowan Companies   Director Inventory Management
Ken Gardner   Transocean   Maintenance Manager & Chairman of the IADC Maintenance Committee
Steve Kropla   IADC
John Pertgen   IADC
Ken Fischer   IADC
Lindsey Hust   IADC
Leslie Packard   IADC
Holly Shock   IADC
Bob Warren   IADC

Committee Establishment Guidelines (Ken Fischer IADC): Summarized the guidelines for committee formation and function (attached to this summary). Committees require certain features to be successful, without which they are not sustainable and participants eventually drop out. Experience over tie has been
that a particular committee or task group doesn’t seem to be producing the deliverables that it once did. In the process of establishing and maintaining a successful committee, the essential ingredients include:

- Idea: agreement of the problem and course of action.
- Champion(s) to pursue successful initiatives.
- Cooperative solutions are desirable/achievable.
- Initiatives deserving of Company’s resources; Support of Management.
- Activities match the organization’s core competencies.

An example of agreement that a cooperative solution is desirable and achievable was described where safety had become a competitive area, although IADC for many years had been issuing safety guidelines safety products and safety deliverables. There’s no progress if the group develops an initiative with a deliverable but the member companies are unwilling to allow use of data or case information.

Successful initiatives require a champion. The elected chairman must have enthusiasm and a desire to champion the effort by bringing other people to help achieve these goals. In addition, initiatives will have deliverables deserving of our companies’ contribution of resources - which also requires senior management support. Last, the activities have to be aligned with the companies’ core competence to ensure quality and results of added value.

Tom Schexnayder Ensco plc: (Summarized) Some of the drillers have met and believe it is time for an S/C Committee with IADC support. We’ve circulated ideas around Mission Statement and Function and believe it will work. We had a group like this some time ago where S/C people met, including presentations, without competitive edge of any kind. It was a relaxed environment with shared ideas, which is what we could do here.

This is a significant step because suppliers are very large so that to effect positive change, we would need to come together as a group with the principal that it is necessary for us to impact improvement.

The requirement is to keep all proceedings positive, since everyone has some very interesting experiences they could share. When we review the IADC Mission & Function Statement, our goal is to facilitate exchange of best practices, basically ensuring that the drilling contractor becomes a better customer and that our vendors become better vendors. There is some information here about how we would do that. The mission statement is pretty distinct and straightforward.

Question asked about review and request for modification. (None at this time).

The main function includes the following:

1.1 To advance the supply chain function in the drilling industry by providing a forum for the exchange of knowledge, best practices, and ideas between committee members and IADC at large.

Discussion: Consider including a reference concerning required documentation with the suppliers. For now, if this process works properly, contractors should be aligned and hopefully won’t have to address documentation with them. To be revisited.

John Pertgen (IADC): Concerning an area of caution: when dealing with certain information about vendors, it’s very necessary to exercise caution about what is presented. Information is recorded in Committee minutes that Vendors do not/may not want shared. Information must be recorded accordingly and reviewed before posting or discussion in meetings.
**Discussion:** Interest is to establish the S/C Committee as the primary forum for the drilling contractors, and develop sub-committees that include vendors and other organizations to further the agenda. The group was in agreement with the provision that all activities be as transparent as possible.

Goal was to have a primary committee with sub committees. Review of slides (attached to this summary) followed with comments.

1.2 concerns supplier performance metrics - if Contractors are in agreement to supply performance metrics. Every company has them - drillers have theirs and vendors have theirs that aren’t always in agreement. Consistently applied IADC metrics are needed that all parties agree are accurate and apply equitably. A positive result would be that IADC recognizes Vendors who achieve excellence in performance according to agreed measurement.

1.3 is far reaching as some of the standards dealt with in any convention with each vendor is different and each driller is different. Changing the ERP systems is costly and expensive but at the end of the day the result can be a system that is far reaching where everybody can agree to it. Need to use barcoding or get into a standard that will make the industry a lot more efficient.

1.4 recognizes vendors and suppliers that continuously improve the performance of the industry. IADC could enlist the cooperation of the Vendors if Contractors do that. The request was then made for any suggestions or modifications, since the list was initially drafted by 4 or 5 of the participating drilling companies.

**Maintenance Committee Presentation (Ken Gardner, Transocean/Chairman of IADC Maintenance Committee, and John Pertgen, IADC Staff Liaison):** Initially, there were questions about how to look at the visions and strategies, and how to achieve the goals. The Maintenance Committee started with a group of about ten contractors and actually opened up to the vendors. To be transparent, Vendors are invited to make a presentation, but it must be for the benefit of the industry. It’s not about sales products - it has to be about how to improve the industry. The Vendors come in the morning and do their presentations, and then the meeting is closed in the afternoon to Contractors only.

The first part of meeting in the morning addresses general topics in the industry, and the afternoon is committed to the real issues that are confronting drilling contractors.

We found that as a group, each drilling contractor believed they were the only one to have a particular problem so we were fighting it on our own and weren’t using committees like this to leverage the suppliers and manufacturers to change. One of the things that we did was meet to discuss and document the three main maintenance issues we all face and let’s work on them.

We came in with a presentation to identify the issues and how to work on them together. We wanted to collaborate with the Vendors but not be critical. When they start listening to the challenges we all face, their perception of the drilling contractors have changed over the last couple of years. We all have these problems but no one comes to us with solutions so we gathered all the drilling contractors in a room and agreed to work the issues. When we first started there was a lot of friction (with the Vendors), but once everyone understood the purpose, they started delivering on what they said they were going to deliver. When people began supporting the effort, it enabled us to go forward so that now, for instance, the Maintenance Committee has a call with Caterpillar every month and they run that meeting as part of the engines group of the Maintenance Committee. They talk to every drilling contractor at the same time; they get all the same information and hear the same story and report back to the Maintenance Committee with their efforts to improve on the issues.
Originally, the engines problem was a sub group of the Maintenance Committee and we had to keep minutes on that information. We determined that Caterpillar doesn’t want to publicize their problems in the meeting minutes so we took the group and turned it over to Caterpillar. Now, they come back to every Maintenance Committee meeting with a report on their work to improve the issues. They have control of the information, but we get the report of their work, which has improved accountability.

The Maintenance Committee is not trying to get into every drilling contractor’s business; each one has their own work going on. We are just talking about issues. The other point that became a product of the Maintenance Committee, is that a Vendor meeting with the drilling contractor you only meet for an hour or two hours that doesn’t mean anything when you start looping into the cost and the impact of customer’s definitely opened their eyes. In fact Caterpillar Petroleum the group didn’t have any say in Caterpillar because the drilling contractor guys were kind of running everything. As a result that group has the say.

Now when we say we need improvement with an issue, it happens. What Caterpillar has done with the injectors and things when we needed someone there to help us test: now what they are doing is running different pilot tests on different rigs for different companies so the end result is that they are helping the industry. How do we get to the next manufacturer to get them on board? At the next Maintenance Committee meeting, we requested NOV to join us. That was an interesting dynamic because we’d had about four conversations with them and they were reluctant to come to the meeting because they thought it was going to be a NOV bashing session.

NOV representatives did agree to join us and we said we have to resolve these issues. We all have the same problems that we need to address. We had a good presentation with them, and agreed we need to listen to the customer and the challenges (address three items) and move on.

We want someone from NOV like the Caterpillar representative who is their champion for this group. Prior to that we had a sales rep in the petroleum group and we got nowhere. When we engaged an individual who had the required background and understood our issues, the relationship took off. We have wonderful support internally from Caterpillar, and we have excellent feedback and results from them. We have also stepped up to addressing EMD engines with the same situations and same groups. We’re working on it.

This is what we are working to build on. When we consider issues, often it has been studied before and written about. One of the areas we discuss is the reliability process and one of the best material sources is a man named Ron Moore who started a company called CSI and wrote a book called Making Common Sense a Common Practice (REFER to the attached Reliability Process Chart).

The manufacturer designs a piece of equipment and it has flaws that can’t be found until someone operates it. There is then a root cause for failure built into the product before we buy it. After we purchase, we store -and later, we install and startup. When we encounter problems, we try to figure out how to operate and maintain, and the end result is required maintenance work that causes losses and downtime. In the end, what was reliable ten years ago isn’t necessarily reliable today. We experience major QA/QC coming out in the yards. We see that what used to be reliable is not the case anymore and we are seeing in some cases that equipment has been installed incorrectly in the shops.

We see a lot on our well control equipment where components were reliable before are developing premature failures. The challenge is that if the equipment is installed for a year but it keeps failing, the first thing that happens is that your maintenance program changes every three months and the equipment is not replaced, but then we change the design and we get into a loop. The other challenge we have is
with spare parts when delivery is quoted at 6 months and it is really 9 or 10 months. If you are working to align your deliveries and your maintenance, we have a major disconnect.

This is the type of negative impact that our manufacturers need to understand that they have on our business.

Another area discussed by the Maintenance Committee is how to benchmark our companies. A presentation done by MRG, a reliability consulting company discussed the size of the oil and gas industry, and how we can become more efficient compared to other industries. There is a lot of opportunity for making a difference. With mining, food, and beverage, you see what the other groups have worked through in their efficiency effort (refer to slide of Reliability Chart) in excess of 900 billion dollars. We have to understand that we are all in this together. The spare parts business is the responsibility of our manufacturers. Consider the airline industry today: they passed a lot of responsibility back to the manufacturers. If we applied that principle to our industry, we could see substantial opportunity for savings and improved efficiency. Again, if we benchmark ourselves, there is 1.7 trillion dollars of obsolete assets in the United States, and a lot of opportunity.

We send out an agenda a month in advance where we list the items we are going to discuss and schedule a main presentation with an applicable topic. We review the presentations during the morning session and after the main presentation, we have a Lunch & Learn with another topic that interests the group, then we close the session for privacy to drilling contractors only. Once the meeting is done, the minutes go out for comments and then they are published on the website for review.

**Tom Schexnayder Enco: (IADC Supply Chain Topics Presentation)**

For this meeting we have a listing of potential topics that could improve the Supply Chain for Drillers. The intent would be to propose these topics to find relevance in discussion for the meetings and formation of potential sub committees. These topics are based on presumptions. The topics are as follows:

“Global Logistics and Trade” this topic is well known to international drillers, it is challenging and changes every day. The second topic is “Metrics”, every driller and vendor use metrics to measure performance. The third topic is “Quality”- and who owns “Quality” as it is different by definition in companies and organizations. Where does quality reside within the company? The forth topic is “Process Efficiencies”- which is future state of standardized data content and electronic media, Additional topics for discussion include “Supply Chain Challenges”, and “What Good Looks like”. (General approval of topics).

Global Logistics and Trade (refer to slide): If you are doing business internationally the corruption perception index chart should be familiar to you. I sat down with our Logistics and Trade Director and asked what could IADC be doing at this meeting to support drillers, and he came across with these bullet points. (Referring to the slide) Areas where Vendors can support International Drillers in shipping equipment internationally is worthy of discussion. It may be a good subcommittee topic and should be considered including ITAR and other US regulations since many items shipped international could potentially have dual use.

The next topic is “Vendor Metrics.” IADC members should be able to use the vendor metrics as a measuring tool whereby vendors and drillers have an agreed upon benchmark whereby the Supply Chain can improve. We might consider a subcommittee creating an agreed upon standard set of IADC Vendor Metrics.

“Quality” could be part of the “Vendor Metrics” subcommittee or it could be a standalone subcommittee with agreed expectations. How could the subject of “Quality” be supported by IADC? Most companies
already have means of measuring Quality individually by department, depending on the definition of quality. (Topic tabled).

“Process Efficiencies”, IADC member companies separately cannot achieve the Wal-Mart effect with barcodes, whereby vendors barcode products using a Wal-Mart standard label. It is conceivable that the IADC Supply Chain Committee may achieve a certain level of standardization. If so, we could establish an IADC barcode standard, accepted by vendors, labels applied by vendors to be used to scan and put material directly on the Rig storeroom shelves without relabeling. This is a topic worth discussing, the return on investment in inventory through management of the process and reducing the workload by automating a system with fewer inaccuracies. We could consider other process efficiency topics such as RFID technology and move into other areas such as standardized packaging.

There are other supply change challenges that drillers contend with such as, quality control, on time deliverables, service after the sale, etc. Let’s face it; drillers can be difficult and demanding. There is not enough Supply Chain communication amongst the drillers because we are in competition. There’s no reason why we can’t discuss this information and overcome our competitive nature to work together to become better customers. This is a topic worth discussing and possibly creating several IADC standards to demonstrate credibility. This would be a win in win our industry if we can accomplish industry standards through IADC.

The second to last slide concerns “What Good Looks Like” if we can achieve anywhere near this goal than the Supply Chain Committee would be successful. Quality manufacturing of equipment meeting expectations could be another discussion topic.

(The Maintenance Committee has been working on something similar to this with supply and demand. It was discussed that working with the Maintenance Committee to create a standard list of critical spares to give to all the vendors. And also add a bullet to this topic on services and service technicians and discussing having better qualified technicians).

OPEN DISCUSSION & COMMENTS

The group was asked how to engage the topics and the vendors.

There was overall agreement to follow the Maintenance Committee model. Consider breaking vendors into categories and have their own sub committees based on their needs and requirements to include original manufacturers, small suppliers, middle ground suppliers, and Mom & Pop shops that are important to the day to day operations.

There was consensus to establish the Supply Chain Committee.

Committee governance: Discussion concerning Contractor company support and intention to participate in developing committee initiatives and agendas. Tom Schexnayder (Ensco) agreed to serve as Chairman and Damon Flores (Maersk) agreed to Co-Chair the Supply Chain Committee, The requirement is for everyone is to see deliverables which are beneficial to all Contractor companies and supported at the executive level by the IADC Executive Committee. The IADC committees are run by the members who set the agendas, topics, initiatives, and timing of meetings.

Decision made to meet monthly until the committee is well established.

Next Meeting Date and Venue:

11:00-2:00 Friday, 17 May 2013, IADC Crown Center 1 & 2 Conference Rooms