



**IADC UBO & MPD
Committee Meeting
MoM**

**1st Quarter Meeting
Mar 30 – 31, 2017
Rio de Janeiro, Brazil**

Day 1 – Thursday March 30

Welcome, Announcements and Safety Moment

Oscar Gabaldon welcomed the UBO & MPD Committee and thanked Air Drilling Associates for sponsoring the meeting. Following, a short video with safety information from the hotel was shown.

Introduction of Committee Members and Guests. The group was asked to introduce itself. Each attendee gave an introduction including company name and work location. See Appendix 1 for the detailed list of the attendees.

Konstantin Puskarskij was appointed to be a minute taker.

Oscar Gabaldon read IADC antitrust guidelines to the attendees.

Brian Piccolo gave the safety moment.

In the absence of Per Cato Berg, minutes from Q4 2016 meeting were used for recap.

Q4.16 Meeting Minutes – Review

Oscar went through the MOM from the 4th quarter meeting. No feedback back was received, therefore the minutes were automatically approved.

Discussed Meeting and conference schedule

2017 Committee Meeting Schedule.


Quarter	Date	Location	Sponsor
Q2	June 6 – 8	Houston	Blade
Q3	August 23 – 24(?)	London/Houston?	Schlumberger
Q4	December	Houston	Maersk Training
Q1(2018)	April 19-20	New Orleans	TBD

Post data note: Blade confirmed dates and location for sponsoring Q2 meeting, the week after discussion.

Discussed about shared venue for Q3 meeting, and the general opinion is not favorable. However, the agreement at the moment is to maintain main meeting in London with potential offsite meeting in Houston.

General Discussion

Question why Oscar Gabaldon and not John Kozics acts as the committee Chairman was raised. This due to the fact John has changed his role in Transocean with more work and he cannot serve his role in the committee any longer. Oscar was asked before the meeting by IADC if he would agree to step up as the Chairman, which he did. Hence during the meeting, the committee vice chairman election should take place.

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Subcommittee reports

UBD

Antonio Torrealba provided the update:

- Due to limited amount of work the subcommittee have at this moment its members will support MPD subcommittee.

MPD

Andre Alonso Fernandes gave an update:

- API expect API RP 92M will be published soon (6 weeks from today).
- On API RP 92P all the comments were processed. However, there was an issue with one of the attachments and it was resent to API by Per Cato.
- On API RP 92S, remaining comments (56) shall be processed during the current meeting.
- Not all committee members received invitation to the WebEx meeting where comments to 92S were processed. The feedback to IADC will be provided to avoid similar situations in the future.
- In general, suggestion is to focus on technical discussion regarding the subcommittee initiatives:
 - Potential establishment of the MPD WCE subcommittee and general discussion around of use of MPD for well control purpose;
 - SBP procedures from drilling contractors;
 - RP for continuous circulation;
 - RP for surface PMCD (based on 92P).

DGD

Borre Føssli updated the group:

- API RP 92C is now officially listed by API for CML practices and 152 comments to the draft document were processed during Q4 2016 meeting. During the same meeting it was also agreed to align 92C with 92S text which is in the more developed stage. So currently 92C is awaiting on the finalization of the 92S comments and will be processed further during Q2 2017 meeting.
- For this meeting, while 92C is in the waiting mode (waiting for 92S), Borre it is suggested to discuss in the regulatory and technical aspects of tophole drilling in different part of the world. Unless the tophole drilling discussion doesn't belong to MPD committee scope of responsibility.
- The committee agreed to discuss this further during the course of the meeting.

HSE & Training

Oscar Gabaldon provided the update:

- Draft curriculum for MPD training is finalized, and submitted for IADC review. Feedback already received.
- Discussion with IADC was initiated to align the approach on the requirements for training and certification.
- It is planned to process the feedback during the meeting.



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Gas in the Riser

SafeKick provided a partial update on behalf of Paul Sonnemann:

- 20% of gas influxes believed to be estimated to go to the riser, which makes this topic very important for the industry. The gas physics in the riser is different between shallow and deep water, which seems to be not a general awareness in the industry and the subcommittee efforts are focused on educating the industry about this difference.

16RCD task group

Update provided by Martin Culen:

- The last meeting was in August 2016 in Houston. The discussion around the API monogram is still ongoing where clarification around the monogram application is still with API.

Liaison Reports

No update from Regulatory liaison and Well control liaison.

New Business Discussed

Class notation discussion

DNG-GL has published a new revision of DNVGL-OS-101 with the updated deadline of 13th of April. Per Esvall from DNV-GL provided a general overview on the changes in the new standard revision. The question on how DNV-GL approach subsea intervention was raised and the reply was that in case the specific standard is not developed by DNV-GL normally the one shall refer to other industry standards like API or ISO.

The question on how the set of API RP 92 series may impact OS101 standard was asked. So far DNV-GL just follow on the progress.

Question if the MPD control software shall be considered as a barrier was asked and DNV-GL is of the opinion that it shall be considered as a barrier.

MPD committee appreciate DNV-GL openness on the OS101 revision development where the industry was invited to comment on the process.

Everybody on the MPD committee is encouraged to request access (if not yet available) and provide the comments.

ABS seems late with the Appendix 7 publishing and MPD subcommittee shall follow-up on the development (CJ Bernard).

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Documents and discussion prioritization

Antonio Torrealba presented the list of the previously agreed (December 2015) priorities and guided the group through the list. Since all the ballots review will be finalized soon the committee shall agree on the prioritization of the future activities.

Antonio Torrealba volunteering to update the list and process it for another round of voting within the committee to agree on the committee priorities. Gas in the riser and MPD well control will be added to the list while the rest of the list will be maintained. Antonio shall arrange the survey with Leesa.

Visibility on the status of the items on the list along with the status on the already processed/ issued documents was requested.

Suggestion is to place the priorities list somewhere on the IADC MPD committee site where it can be easily found and not just attach it to committee meeting MoM.

In case members have any good suggestion on the items which can be added to the list this shall be on the Agenda for the next committee meeting for the discussion and potentially for the dedicated work group to develop this topic further. Reference to tophole drilling questions raised by Borre, which might be on the agenda for the next committee meeting to evaluate if this discussion belongs to MPD committee space or this shall be discussed in other IADC committees like drilling or environmental. The suggestion was to discuss the tophole drilling within IADC prior to Q2 meeting to align where this shall be anchored.

The concern was raised that the committee loose the focus on the overall MPD/UBD technologies which are still predominantly on land or jack-ups rigs and move towards the deep water MPD application field. Chairman highlighted to the committee that during the voting round this concern shall be considered by all the members regardless if their primary interest is deep-water; e.g., surface stack PMCD RP or 92U update.

12:00 Lunch - Sponsored by Air Drilling Associates.


13:00 Continued discussions on new business

Pending positions in the Committee

Committee have 2 positions to fill; committee vice-chairman and DGD subcommittee vice chairman.

The discussion about qualification of the nominees emerged and the committee member's position is that the nominees shall be from the people normally presented on the committee from the long term stand participated companies but keeping the diversity both company background wise but also geographical.

- Andre Alonso Fernandes (Petrobras) was nominated as the vice-chairman for the MPD/UBD committee with full support from the forum. Nobody else was nominated.
- Sara Shayegi (Shell) was nominated as the vice-chairman for the DGD subcommittee with full support from the forum. Nobody else was nominated.

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Dynamic Influx Management

The concern was raised if the UBO & MPD committee discussing well control aspect will be in conflict with IADC WC committee. However, it seems that there is little or no overlap between scope of work within UBO & MPD and WC committees where the border line is between well primary and secondary barrier. So all the discussions within UBO & MPD committee shall be within the well primary barrier field.

The suggestion to anchor MPD well control discussion in the riser gas subcommittee was rejected by the committee due to narrow application window where the discussion shall also cover riserless drilling and land rigs.

Oscar Gabaldon elaborated on the dynamic influx management discussion which was initiated previously with few meetings in Houston being held on this subject. It seems to be a common recognition within the committee that this subject shall be developed further.

The proposal is to bring this topic for the Q2 meeting in June (as a breakout session) with a target to establish a work group potentially setting additional guidelines to 92M and 92S in a form of addendum or similar.

The agreement was to add this topic on the meeting Agenda and committee members are encouraged to be prepared for this discussion.

14:00 Breakout sessions

Breakout sessions

- API RP 92S will finalize comment resolution.
- Gas in the riser.
- API 16RCD.
- HSE & Training to have an offline discussion on IADC feedback.

15:45 Reconvened the committee

Summary of breakout sessions for the day

MPD subcommittee

- Progress made, 35 comments still to be processed during day #2.

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Gas in the riser subcommittee

- Established target on issuing an addendum to “IADC deep water well control guidelines” with recommendations on how to manage riser gas issues. The scope will be limited to behavior of the gas in the riser when the gas is already in the riser.

HSE & Training subcommittee

- Reviewed feedback from IADC on MPD training curriculum draft. Minor edits to curriculum, most comments related to whether MPD training certification should be a standalone certification, as opposed to being part of the WellSharp system.
- Breakout session to start addressing instructors’ qualification requirements on day #2.

16:00 Meeting adjourned for the day

Day 2 – Friday March 31

Oscar Gabaldon welcomed back the UBO & MPD Committee and thanked Air Drilling Associates for sponsoring the meeting.

Robert Ziegler provided additional update from the Gas in the riser subcommittee

The product the subcommittee want to produce is an addendum to the IADC well control manual document which will be focused on the gas in the riser physics.

The full scale experiment with the real drilling mud is being discussed to support the addendum topic, since it is very difficult to model the gas in the riser in the computer model.

Weatherford have started to collect all the data on the mud gas separators on the deep water units and the work was really appreciated when presented in the IADC conference. The idea is to include this data in the very same addendum.

Subcommittee plan to meet during the OTC event in Houston.

Oscar Gabaldon mentioned that BSEE issued a proposal for the gas in the riser study which when completed will be in the public domain.

Public session with BSEE on the well control study is planned to be held in Houston the 17th of April (Double Tree Hotel by Houston airport).

The question if BSEE knows about the UBO & MPD committee riser in gas subcommittee efforts was raised. So far BSEE have not been informed.

Robert Ziegler plans to inform BSEE that there are industry committees and subcommittees which work can be used by BSEE rather starting new studies.



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The question was asked if the riser gas handler subcommittee efforts shall be an addendum to one of the API RP 92 series rather than to IADC document. It was agreed to evaluate the way the document will be published at the later stage but for the initial version it is believed that IADC is the faster route to be published. The next version can potentially be published as a part of the RP 92 series.

New revisions API 16C and RP 64 will include some more recommendations around the MGS.

Robert Ziegler elaborated on the BP gas in riser workshop where he was the only who attended this event. The general feedback is that the workshop wasn't very productive and the minutes have not been yet distributed.

09:00 Breakout sessions

Breakout sessions

- MPD: API RP 92S.
- Gas in the riser.
- API 16RCD.

12:00 Lunch - sponsored by Air Drilling Associates.

13:00 Presentation by Dag Vavik, Future Well Control on the alternative vision of the influx origin for the Macondo blow-out

15:00 Reconvene for updates and closeout.

- MPD subcommittee has completed working with comments to API RP 92S.
- Gas in the riser subcommittee provided an update on the break-out session.
- API 16RCD task group provided an update from the break-out session. Good progress was achieved and future activities were aligned among the group.
- Training working group provided an update on the break-out session.

16:00 Oscar thanked the group for great participation, thanked Air Drilling Associates for sponsoring the meeting, and adjourned the meeting.



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Appendix 1. Attendance List:

Name		Company Name
Brian	Piccolo	AFGLOBAL CORPORATION
Antonio	Torrealba	AIR DRILLING ASSOCIATES, INC
Roland	Goodman	AMERICAN PETROLEUM INSTITUTE
Martin	Culen	BLADE ENERGY PARTNERS
Oscar	Gabaldon	BLADE ENERGY PARTNERS
Jeff	Graybeal	DIAMOND OFFSHORE
Borre	Fossli	ENHANCED DRILLING
Dag	Vavik	FUTURE WELL CONTROL AS
Daniel	Braga	LOUISIANA STATE UNIVERSITY
Andre	Fernandes	PETROBRAS
Guilherme	Vanni	PETROBRAS
Micah	Spahn	PRUITT TOOL & SUPPLY CO
Martyn	Parker	PRUITT TOOL & SUPPLY CO
David	Postel	REGIONAL MARINE & ENGINEERING SERVICES PTE LTD
Johnn	Bjerkaas	SCHLUMBERGER NORGE AS, DIVISION M-L SWACO
Sara	Shayegi	SHELL EXPLORATION & PRODUCTION
Robert	Ziegler	WEATHERFORD TECHNOLOGY & TRAINING CENTER
Per	Esvall	DNVGL
Blaine	Dow	SCHLUMBERGER
Kim	Laursen	MAERSK TRAINING
Evelyn	Baldwin	MAERSK TRAINING
Omer	Kaldirim	TEXAS A&M UNIVERSITY
Aaron	Mendonsa	TEXAS A&M UNIVERSITY
Roed	Bjarte	FUTURE WELL CONTROL
Tom	Proehl	ENSCO
Konstantin	Puskarskij	MAERSK DRILLING
Leiro	Medina	BEYOND ENERGY SERV.
Serkan	Cenberlitas	BLADE ENERGY PARTNERS
Andre	Tagues	SAFEKICK
Ana	Mansilha	SAFEKICK
Leonardo	Correa	SAFEKICK
Ragnar	Nielsen	FUTURE WELL CONTROL
Jay	Lancaster	SEADRILL
Gavin	Humphrey	STENA DRILLING
Einar	Bergseth	LUNDIN NORWAY
Amber	Beutler	EXXONMOBIL