	<p style="text-align: center;"><b>IADC UBO &amp; MPD Committee Meeting</b></p>	<p style="text-align: center;"><b>3<sup>rd</sup> Quarter Meeting August 24-26 2015 Houston, TX</b></p>
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**DAY 1 – 24<sup>th</sup> August 2015**

**Welcome, Announcements & Safety Moment.**

**Morning Session:** David Pavel welcomed the UBO-MPD committee. Reminder given on actions to take in the event of a building Alarm. The IADC Anti-Trust Policy and Guidelines were brought to the attention of the Committee. The Guidelines can be retrieved in their entirety from the IADC Web Site.

Safety Moment – Choking hazards and life saving techniques. Learn CPR.

**Review of Q2 Meeting, held in Dubai.**

UBD Subcommittee	Dennis Moore Mike Vanderstaak	<ul style="list-style-type: none"> <li>• API 92U comments, No Update</li> </ul>
MPD Subcommittee	Per Cato Berg John Kozicz	<ul style="list-style-type: none"> <li>• 92M Applied Backpressure Surface Stack</li> <li>• Continued IADC RP for MPD / Subsea BOP. Draft is currently available for review.</li> </ul>
Dual Gradient Subcommittee	Iain Sneddon	<ul style="list-style-type: none"> <li>• Getting ready for DGD workshop at Moody Gardens following Well Control Conference.</li> </ul>
Training	Oscar Gabaldon	<ul style="list-style-type: none"> <li>• continued development of supervisory curriculum</li> </ul>

**Introduction of Committee Members and Guests.**

The group was then 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.

**Topics discussed**


The committee finalized the list of possible documents which the committee should be working on in the coming years. The list should be sent out to the committee for review and prioritization. **Action: David Pavel**

Discussed meeting format. Decided to check the possibility of using video conferencing equipment to facilitate meeting in London and Houston. **Action: MPO**

Decided to align the structure of the 3 documents under construction. **Action: Per Cato Berg**

**Start Breakout sessions - 4 Groups**

- 16RCD
- Training
- Applied Backpressure (ABP) MPD with Subsea Stack
- Dual Gradient Drilling (DGD)

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**Notes from the Breakout sessions of the 3 day meeting:**

**MPD Subcommittee:**

Reviewed comments for ABP with Subsea Stack document

Status of documents:


1. ABP surface BOP (92M)
  - Ballot comments received Feb. 2015
  - 236 of 266 comments processed
  - Plan: Process remaining comments in WebEx Sept. 16<sup>th</sup>
2. PMCD subsea BOP
  - Document sent to API
  - Plan: Implement some changes (based on 92M ballot) before API sends it out for ballot
3. ABP subsea BOP
  - Sent out for IADC internal review.
  - Received 246 comments
  - Plan: Implement some changes (based on 92M ballot) Pre-process comments before London meeting (Dec.)

Action plan to review prior to Q4 meeting –

- Chapters 1,2,3,8 – Per Cato
- Chapters 7, 9 – Petrobras
- Chapters 4, 6 – ABS
- Chapter 5 – Transocean

**Training Subcommittee:**

- Addressed PBR comments to MPD Fundamentals curriculum
  - Proposed to remove Driller, leave on the Supervisory curriculum
- Completed first draft of Supervisory curriculum
  - Now to review by Subcommittee members, prior to submission to general Committee for approval.
- Course format
  - MPD Training should be IADC Certification
  - Fundamental (8 hrs) and Supervisory (24hrs, including Influx Management and Problems modules) levels.
  - 2 year certification
  - Not part of IADC Well Control
  - Recertification: Take full class every other certification period. Take refresh class in between, before current certification expires.
    - Refresher is basically the MPD Influx Management and MPD Problems and Complications modules

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- To be discussed with IADC
  - Process of certifying training programs/organizations
    - Curriculum
    - Instructors
  - Testing requirements
  - Computer based/online training
    - Only Fundamentals
    - Main issue would be testing, would need to be addressed
  - Propose modules on Influx Management and MPD Problems and Complications (8 hrs) to be add-on for IADC Well Control certification
- Plan forward
  - Review by Subcommittee and send feedback to OG by EO September
  - Prepare final documents and submit to Committee by EO October
  - Propose vote by Committee on both Fundamental and Supervisory levels in Q4 meeting

**DGD Subcommittee:**

- **No DGD Event (Workshop / Seminar) planned for next year (2016)**
  - Plan is to have next DGD Event (Workshop / Seminar) in conjunction with SPE/IADC MPD & UBO Conference in Rio, Brazil in 2017. Format of event to be developed.
- Group agreed that work needed to start on preparation of a “DGD Recommended Practices Document” and this would be the focus of the Subcommittee in upcoming Meetings this year and next year.
- John Cohen committed to preparing a document creating an “audience list” – namely who we would be preparing these documents for, who’s going to read / use them.
- Discussion on format and framework of the document. It was proposed that we use the Draft NTL prepared for BSEE and the 4 DGD Techniques posters as basis to develop the document framework.
- Plan for document to discuss common themes of DGD at high level and then branch into the 4 processes below.
- Iain Sneddon & Frederic Jacquemin to work on having Document Framework for review at Q4 Meeting to be held in London, 08 – 10<sup>th</sup> September 2015.
- Iain Sneddon to put together an e-mail inviting key DGD related individuals to participate in developing the Practices, allowing for travel / cost restrictions etc
- Frederic Jacquemin presented at the Well Control conference on Thursday.

**RCD Task group:**

Continued work on the operational testing standard. Ref. attached MoM for details.



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**Appendix 1: Attendees List**

Jay	Bruton	<b>AMERICAN BUREAU OF SHIPPING</b>
Martin	Culen	<b>BLADE ENERGY PARTNERS</b>
Oscar	Gabaldon	<b>BLADE ENERGY PARTNERS</b>
Inam	Haq	<b>BLADE ENERGY PARTNERS</b>
Patrick	Brand	<b>BLADE ENERGY PARTNERS</b>
Chris	Scarborough	<b>BP</b>
Scott	Johnson	<b>BP</b>
Nate	Smith	<b>CAMERON</b>
Glenn	Josnson	<b>CAMERON</b>
Tamas	Mezo	<b>CONTITECH RUBBER INDUSTRIAL LTD</b>
Gergely	Szekely	<b>CONTITECH RUBBER INDUSTRIAL LTD</b>
Jeff	Graybeal	<b>DIAMOND OFFSHORE DRILLING, INC.</b>
Patrick	Stokes	<b>DRILLING INNOVATIVE SOLUTIONS, LLC</b>
George	Hanst	<b>DRILLING INNOVATIVE SOLUTIONS, LLC</b>
Tom	Dixon	<b>EFC GROUP EFC AMERICAS INC</b>
Craig	Clarke	<b>EFC GROUP EFC AMERICAS INC</b>
Kaydree	Uzelman	<b>ELITE ENERGY PRODUCTS</b>
Andrew	Barabash	<b>ELITE ENERGY PRODUCTS</b>
John	Cohen	<b>ENHANCED DRILLING</b>
Christopher	Bernard	<b>HALLIBURTON</b>
Joseph	Karigan	<b>HALLIBURTON ENERGY SERVICES</b>
Mike	Vander Staak	<b>HESS CORPORATION</b>
Leesa	Teel	<b>IADC</b>
Jeff	Robbie	<b>MANAGED PRESSURE OPERATIONS (MPO)</b>
Dennis	Moore	<b>MARATHON OIL COMPANY</b>
Dag	Vavik	<b>MHWIRTH</b>
Juan	Beltran	<b>M-I SWACO A SCHLUMBERGER COMPANY</b>



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Ron	McInnes	<b>M-I SWACO A SCHLUMBERGER COMPANY</b>
Jaye	Shelton	<b>M-I SWACO A SCHLUMBERGER COMPANY</b>
Shantur	Tapar	<b>NATIONAL OILWELL VARCO</b>
Roberto	Zerkowski	<b>NATIONAL OILWELL VARCO</b>
Bill	Huckaby	<b>NATIONAL OILWELL VARCO</b>
Tracy	Mossman	<b>NEXEN PETROLEUM</b>
Frederic	Jacquemin	<b>PACIFIC DRILLING</b>
Guilhereme	Vanni	<b>PETROBRAS</b>
Emmanuel	Nogueira	<b>PETROLEO BRASILEIRO SA</b>
Martyn	Parker	<b>PRUITT TOOL &amp; SUPPLY CO</b>
Jose	Torrealba	<b>REFORM ENERGY SERVICES CORP</b>
Paul	Sonnemann	<b>SAFEKICK</b>
Duff	Sibanda	<b>SCHLUMBERGER</b>
Mauricio	Aguiar	<b>SEADRILL</b>
Sara	Shayegi	<b>SHELL INTERNATIONAL EXPLORATION &amp; PRODUCTION</b>
Brian	Tarr	<b>SHELL INTERNATIONAL EXPLORATION &amp; PRODUCTION</b>
Tom	Askeland	<b>SIEM WIS AS</b>
George	Medley	<b>SIGNA ENGINEERING CORP</b>
Per	Berg	<b>STATOIL</b>
Gavin	Humphreys	<b>STENA DRILLING</b>
Stewart	Wilson	<b>STRATA ENERGY SERVICES</b>
Ryan	Klemetson	<b>TOLOMATIC INC</b>
John	Kozicz	<b>TRANSOCEAN</b>
Iain	Sneddon	<b>TRANSOCEAN OFFSHORE</b>
Brian	Grayson	<b>WEATHERFORD UNITED STATES</b>
David	Pavel	<b>WELLING &amp; COMPANY</b>