

**IADC Advanced Rig Technology  
 Drilling Controls Committee Meeting  
 Minutes:**

**25 June 2015  
 9:00 A.M. – 10:30 A.M.**

**Location:**  
 IADC Offices  
 10370 Richmond Ave. Suite 760  
 Houston, TX 77042  
 Tel: (713) 292-1945

**AGENDA**

<b>9:00 – 9:15</b>	<p><b>Welcome and Introductions</b>          Trent Martin – Chairman – Transocean</p> <p><b>Review of Antitrust Guidelines and Facility Orientation</b>          IADC – IADC</p>
<b>9:15-9:25</b>	<p><b>Trent Martin &amp; Chris Goetz – Review of WG1 Task</b></p> <ul style="list-style-type: none"> <li>There generally is agreement in the drilling community that the current DCS alarm offerings have variability in how they meet process alarm standards such as YA711 or ISA 18.2. The IADC ART committee will investigate if a guideline can be written by IADC for system suppliers and drilling contractors to improve how alarms are actioned by role. Specifically the group will review existing protocol standards for alarm management and reporting that will include but not be limited to: Role, Alarm Message, Equipment Origin, Alarm Meaning, Priority, Action and/or Resolution and consequence. With the end goal of identifying the methodology of applying this standard to a DCS.</li> </ul> <p><b>Minutes:</b>          Suggestion by Mike Lyssy to add ‘consequence’ to the guideline statement (included in above)</p>
<b>9:25 – 10:15</b>	<p><b>Minutes:</b>          Discussion</p> <p>From the discussion we continued that there are two main areas of concern a) design of systems and b) effective use of current and future alarms. We discussed that we should focus on alarms need use from future systems.</p> <ul style="list-style-type: none"> <li>The Design aspect, including human factors, is a key opportunity for conformity in the industry (auto controls and semi-conductor examples). However it is also an area were competitive or vendor</li> </ul>

- specific desires and responsibilities to meet standards are focused.
- The end users' use. From the statement above it was discussed that one major challenge for the end users is the rationalization of the alarms that are received per the categories outlined above. How we manage the alarms and what we should be doing with them as Drilling Contractors.

For areas that cross the line into vendor competitive advantage we agreed to leave the field open and adjust/stop the discussion once the situation arises. This keeps the group in compliance with IADC anti-trust guidelines.

Four Main Work Areas of Needs for Clarity were identified in the group discussion:

- 1) Understand /Document /Communicate what is the value of working on DCS alarm for the IADC. What is at risk
  - a. It was suggested that getting a history of Alarm related failures or successes from both within and outside of the O&G industry would lend documented value for wanting to achieve the aims of the group and objective statement.
  - b. It was suggested that we start with publically available records like IADC.
  - c. Nathan Moralez of BP volunteered to coordinate the collection of these and invited others to email ideas and suggestions
- 2) Summarize the standards as applied to DCS.
  - a. Three, perhaps more, standards seem to apply. YA711, EEMUA 191(recommendation), and IAS 18.2(Standard) (or IES 6282)
  - b. Each have guidelines for design, specification, management, and use. Along with KPIs for the system performance of alarms.
  - c. It was suggested that we try to summarize how these apply to DCS, in a fashion similar to what the group did for cyber security standards. The summarization should focus on alarm management and use vs. design factors.
  - d. The following offered to assist.: Trent Martin, Mike Lyssy, Chris Goetz, Matt Romero, and Erland Engum(sp). Matt and Mike have access to EEMUA 191.
- 3) The Design aspect is critical. The human factors visualization and delivery of alarms a key component of that. There is no one industry standard for DCS alarm delivery. However there are best practices and trends in this area. MORE?
  - a. Mike Lyssy offered to present a short summary on HMI guidelines and recommendations
- 4) The Rationalization of how alarms are used and prioritized for DCS by the Drilling Contractors may be the articulation of the method to apply alarm standards for Drillers. This may best be defined by what minimum documentation we require. What minim training of understanding is desired. And how best to define and document an alarm philosophy via a single actionable alarm log.
  - a. Additional points discussed. What does it mean to have an Alarm Philosophy (post vendor deliver). What does that Consist of (alarm log, consequence and action)
  - b. Mike Lyssy offered to present a short summary on alarm

	<p>mgmt. as part of Design overview</p> <p>c. Nathan Moralez offered to check on possibility to share summary or highlight points from BP Azerbaijan exercise.</p> <p>d. How Drilling Contractors define and build protocols</p> <p>It is suggested that an update on taken actions be provided to the sub-group lead before the next meeting.</p>
<b>10:15-10:30</b>	<p><b>Next Meeting Schedule and Adjournment</b></p> <p>Trent Martin – Chairman – Transocean</p> <p>Minutes:</p> <p>Tentatively Scheduled for July 30th</p>

**Attendance:**

<b>Name</b>		<b>Company Name</b>
Matt	Romero	<b>ABS GROUP</b>
Rick	Scott	<b>ABS GROUP</b>
Mike	Lyssy	<b>AE SOLUTIONS</b>
Nathan	Moralez	<b>BP</b>
Ed	Gaude	<b>CAMERON</b>
Carman	Babin	<b>CAMERON</b>
Gregory	Villano	<b>DIAMOND OFFSHORE</b>
Tim	Jackson	<b>DIAMOND OFFSHORE</b>
James	Penny	<b>IPT GLOBAL</b>
Christopher	Goetz	<b>KINGSTON SYSTEMS</b>
Jagbir	Dhindsa	<b>M&amp;I Electric</b>
Donn	Nguyen	<b>NABORS</b>
Erlend	Engum	<b>NATIONAL OILWELL VARCO</b>
Curt	Kling	<b>NATIONAL OILWELL VARCO</b>
Steven	Ronan	<b>NORTHWEST TECHNICAL SOLUTIONS</b>
Siv	Houmb	<b>SECURE-NOK</b>
Patrick	Dove	<b>SIEMENS INDUSTRY</b>
Kyle	Ferguson	<b>SIEMENS INDUSTRY</b>