

# International Association of Drilling Contractors



**ART Drilling Control Systems  
CybSec Workgroup Meeting  
03 Dec 2015  
IADC  
10370 Richmond Ave., Suite 760  
Houston, TX 77042**

## Attendance

Name		Company Name
Alex	Bieufair	<b>JELEC</b>
Catherine	Cavazos	<b>NATIONAL OILWELL VARCO</b>
Patric	Dove	<b>Siemens</b>
Erlend	Engum	<b>NATIONAL OILWELL VARCO</b>
Ben	Facker	<b>NATIONAL OILWELL VARCO</b>
Rickey	Heggar	<b>Forum Energy Technologies</b>
Roger	Hofmann	<b>Pacific Drilling</b>
Siv Hilde	Houmb	<b>Secure-NOK</b>
Mike	Killalea	<b>IADC</b>
Trenton	Martin	<b>Transocean</b>
Joseph	Marqua	<b>VANTAGE ENERGY SERVICES</b>
Nathan	Moralez	<b>BP</b>
Richard	Parliman	<b>Lloyd's Register Energy- Drilling</b>
Steven	Ronan	<b>Northwest Technical Solutions</b>
Mason	Smith	<b>Cameron</b>
David	Wagner	<b>AWC INC.</b>
Greg	Villano	<b>Diamond Offshore Drilling</b>
Daniel	Velarde	<b>AWC INC.</b>

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## Agenda for the meeting:

1. Welcome and Introductions
2. Review of Antitrust Guidelines and Facility Orientation
3. Review of minutes from last meeting
4. Action Point List
5. Risk assessment example.
6. Next meeting schedule and AOB

## Minutes:

1. Welcome and short introduction of the participants – “round around table”.
2. Meeting delegates was reminded of the IADC antitrust guidelines.
3. Minutes from the group meetings are posted at: <http://www.iadc.org/advanced-rig-technology-committee/meeting-minutes/>. There were no comments to the minutes from the previous WG meeting.
4. Review of action point list.
  - AP 01: Regarding the guideline: All received comments have been taken into account and the guideline document is ready for final review and polishing. The document will be finalized in a review meeting December 11, 2015, 9am-10:30am. Trent Martin, Nathan Moralez, Patric Dove and Siv Hilde Houmb volunteered for the task. The main focus for the review is the appendices. The guideline will upon completion of the final review be sent to IADC for proof reading and publication.
  - AP02: Top-10 threats for DCS. First draft completed earlier this year. The top-10 threat list is being used as input to the risk assessment example (AP03).
  - AP03: Risk assessment example. See agenda item 5.
  - AP04: Network segmentation standards. Not discussed. Scheduled for discussion at next WG meeting.
5. The IADC guideline document for assessing cybersecurity risks of drilling assets refers to the ISA 62443-3-2 standard, which defines a five-step risk assessment process: Step 1 – Identify System under Consideration (SuC); Step 2 – High-level cybersecurity risk assessment; Step 3 – Partitioning SuC into zones and conduits; Step 4 – Detailed cybersecurity risk assessment; and Step 5 Document security requirements, assumptions and constraints.

The example risk assessment continued from the previous meeting by first performing a short review of the SuC, which is step 1 in the ISA 62443-3-2 risk assessment process. There were no changes to the SuC, but the decision was made to separate the driller cabin into its own zone (step 3). The discussion continued with a review of the high-level cybersecurity risk assessment, which is step 2 in the ISA 62443-3-2 process. The assessment has thus far been done on a generic level, not considering each controller and HMI in particular. The decision was made to extend the high-level assessment to each controller and HMI. The discussion will continue at the next WG meeting.

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6. The next WG meeting is scheduled for January 21, 2016, 10:30am-12pm.

## Action Points:

AP no.	Description	Responsible	Deadline
01	Guidelines for Risk Management and Assessment Methods to use for assessing Drilling Assets.	Siv Hilde Houmb (lead), Matthew Romero, Patric Dove, Nathan Moralez	Final review meeting December 11, 2015.
02	Top 10 threats for DCS.	Marco Ayala (lead), Nathan Moralez, Matthew Romero, Carman Babin, Mason Smith	Sept 4, 2015. First iteration completed. Will be reviewed as part of the risk assessment example.
03	Risk assessment of example drilling asset using ISA/IEC 62443-3-2.	John Cusimano (lead), Marco Ayala, Patric Dove, Nathan Moralez, Greg Villano, Siv Hilde Houmb and all	In progress.
04	Network Segmentation standards and best practices relevant for DCS.	Patric Dove (lead), Marco Ayala, Siv Hilde Houmb	First iteration completed Sept 4, 2015. Scheduled for discussion at next WG meeting, January 21, 2016.