

International Association of Drilling Contractors



**Advanced Rig Technology
Cybersecurity Subcommittee
09 March 2016
IADC
10370 Richmond Ave., Suite 760
Houston, TX 77042**

Attendance

Name		Company Name
Robert	Frandsen	Maersk Drilling
Anthony	Garwick	IADC
Linda	Hsieh	IADC
Siv Hilde	Houmb	Secure-NOK
John	Jorgensen	ABS
Wesley	Knight	Diamond Offshore Drilling
Irene	Laguardia	Nobel Drilling
Steven	Ronan	Northwest Technical Solutions
Brian	Schwind	Blade Energy Partners
Joel	Thigpen	WARTSILA
Nina	Tvedt	Nexia DA
Greg	Villano	Diamond Offshore Drilling

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. Network Segmentation
7. AOB

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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 subcommittee meetings are posted at: <http://www.iadc.org/advanced-rig-technology-committee/meeting-minutes/>. This was the first meeting of the subcommittee. There were no comments to the minutes from the last IADC ART DCS CybSec WG (Jan 21, 2016).
4. Review of action point list:
 - The guidelines have been published and is available on the IADC’s eBookstore. (www.iadc.org/ebookstore)
 - AP01: Top-10 threats for Drilling Assets. This AP has been included in the risk assessment example discussion in AP 02. The top-10 threat list is reviewed as part of the discussion of the high-level threats
 - AP02: Risk assessment example. See agenda item 5.
 - AP03: Network segmentation. This AP has been included in the risk assessment example as part of the discussion of zones and conduits, and countermeasures.

As part of the AP discussion, the meeting reviewed the 2-year work plan for the subcommittee, especially whether to focus on developing guidelines for network segmentation and hardening of drilling assets or incident response and recovery (not currently included in the 2-year work plan). The meeting will discuss further at the May 5 meeting. The meeting is highly encouraged to review the below proposed work plan as preparation for the May 5 meeting:

- March - December 2016: Develop Guidelines for Network Segmentation.
- March – December 2016: Develop Cybersecurity Training v1.0.
- Focusing on risk assessment and management.
- January – June 2017: Develop Guidelines for Hardening of Control Systems focusing on Existing Drilling Assets.
- June – December 2017: Develop Guidelines for Security Monitoring and Audit based on the NIST NCCoE Situation Awareness Use Case.
(https://nccoe.nist.gov/projects/use_cases/situational_awareness)

5. The meeting discussed how to navigate in the risk assessment results. Due to time constraints, the discussion of the result was deferred to the May 5 meeting. The meeting decided to distribute the results to the subcommittee participants in preparation for the May 5 discussion.

6. Network segmentation: Deferred to June meeting.

7. The subcommittee meetings are announced on the IADC website. Please remember to register. The meeting calendar for the IADC ART Cybersecurity subcommittee for 2016 are the following:

- May 5, 2016
- June 2, 2016
- July 7, 2016
- September 1, 2016
- November 3, 2016

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Action Points:

AP no.	Description	Responsible	Deadline
01	Top 10 threats for Drilling Assets.	Part of AP 02.	TBD and dependent on AP 02, as the review of the top 10 threats is part of the risk assessment example discussion.
02	Risk assessment of generic Drilling Asset applying the IADC Guideline and ISA/IEC 62443-3-2.	Siv and all.	First round of assessment completed and presented at Jan 21 meeting. The risk assessment result will be discussed and revised in the May 5 meeting.
03	Network Segmentation standards and best practices.	Part of AP 02.	First iteration completed Sept 4, 2015. The network segmentation discussion is part of the risk assessment example discussion (see AP 02).
04	Evaluate alternatives for collecting and publishing relevant cybersecurity information (vulnerabilities, top 10 threats, etc.)	Siv and Linda Hsieh (coordinate with Mike Killelea)	May 5, 2016
05	Develop block diagram or similar of Drilling Asset (expand on the diagram used for the risk assessment example (AP 02))	John Jorgensen and Siv (and more)	TBD
06	Develop training materials for risk assessment and management	Greg, Wesley and Siv	
07	Distribute risk assessment example result to subcommittee participants	Siv	Done