International Association of Drilling Contractors



Advanced Rig Technology
Cybersecurity Subcommittee
16 November 2017
IADC
10370 Richmond Ave., Suite 760
Houston, TX 77042

Attendance

Name		Company Name
Ben	Ramduny	Seadrill
Ernesto	Espinoza	MHWirth
Siv Hilde	Houmb	SECURE-NOK
Mike	Killalea	IADC
Michael	Lewis	Chevron
Robin	Macmillan	National Oilwell Varco
Melissa	Mejias	IADC
Felipe	Mondragón	Nobel Drilling
Reiner	Ruehman	Weatherford Oil Tool GMBH
Alan	Spackman	IADC
Nina	Tvedt	SECURE-NOK
Michael	Weidecke	Weatherford Oil Tool GMBH

Agenda for the meeting:

- 1. Welcome and Introductions
- 2. Review of Antitrust Guidelines and Facility Orientation
- 3. Review of Minutes from Last Meeting
- 4. Update on Legislative and Standardization Activities
- 5. Review of IADC Cybersecurity Guidelines
- 6. AOB and close of meeting

Minutes:

- 1. Welcome and short introduction of the participants "round around table".
- 2. Meeting delegates was reminded of the IADC antitrust guidelines.

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- 3. Minutes from the subcommittee meetings are posted at: http://www.iadc.org/advanced-rig-technology-committee/meeting-minutes/. There were no comments to the minutes from the July IADC ART Cybersecurity Subcommittee meeting.
- 4. Update on Legislative and Standardization Activities from Melissa Mejias For details, see annex to the minutes.
- 5. Review of IADC Cybersecurity Guidelines

Ben Ramduny (Seadrill) and Nathan Moralez (BP) are working on the network segmentation guidelines. The guidelines are 40-60% completed and expected to be in a final state (ready for formal review) March 2018. To aid in the development of the network segmentation guidelines, the meeting decided to stand up an interim review group. This group is comprised of: Felipe Mondragón (Noble) and Ernesto Espinoza (MHWirth). Robin Macmillan will bring in a network expert from NOV. It was also discussed that it would be good to have a representative from Cameron as well in the interim review group. Siv will contact Cameron.

Ernesto Espinoza (MHWirth) volunteered as the editor for the Guidelines for Hardening of Control Systems.

The guidelines for minimum cybersecurity requirements for drilling assets was renamed and the new title is 'Guidelines for Baseline Cybersecurity for Drilling Assets'. The meeting reviewed the updated draft (ver 1.2) in the meeting, and Siv will update the document based on the feedback from the meeting. The updated draft will then be sent to the meeting delegates for review, before the document is sent for the second formal review. The guidelines are expected to be completed and published in December 2017.

7. AOB and close of meeting. The subcommittee meetings are announced on the IADC website. Please remember to register. The meeting calendar for the IADC ART Cybersecurity subcommittee for 2018 will soon be posted on the IADC website.

The subcommittee is seeking co-chairs, and would like to recruit two co-chairs: one representative from drilling contractors and one representative from operators. Interested candidates should contact Siv, Robin or Melissa.

Updated and tentative schedule of deliverables for the IADC ART Cybersecurity Subcommittee:

- December 2017 Guidelines for Baseline Cybersecurity for Drilling Assets.
- March 2018 Guidelines for Network Segmentation.
- March 2018 Cybersecurity Training v1.0.
- July 2018 Guidelines for Hardening of Control Systems.
- July 2018 Guidelines on Security Monitoring and Audit.

There were no other business and meeting adjourned.

The annexes to the minutes are:

Annex 1: Legislative and Standardization Activities