

# International Association of Drilling Contractors



**Cybersecurity Committee  
25 April 2019  
Quality Airport Hotel Stavanger  
Stavanger, Norway**

## Attendance

Name		Company Name
Hans Olav	Aske	National Oilwell Varco
Howard	Davis	Transocean
Erlend A.	Engum	Secure-NOK AS
Tommy	Evensen	MHWirth
Siv Hilde	Houmb	SECURE-NOK
Dominici David	Keller	Transocean
Gunnar	Knudsen	RigNet AS
Emanuele	LaBella	Transocean
Geir	Lien	HMWirth
Erik D.	Martin	Secure-NOK AS
Juan	Negrete	Rowan Companies
Ben	Ramduny	Seadrill

### **Agenda for the meeting:**

1. Welcome and Introductions
2. Review of Antitrust Guidelines and Facility Orientation
3. Review of Meeting Minutes
4. Hacking Modern PLCs
5. OEM Security Initiatives
6. Network Segmentation Guidelines
7. AOB

### **Minutes:**

1. Welcome and short introduction of the participants – “round around table”.
2. Meeting delegates was reminded of the IADC antitrust guidelines.
  - o. Meeting minutes will be reviewed at the next committee meeting.

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## **4. Hacking Modern PLCs**

Erik David Martin and Erlend A. Engum from Secure-NOK AS discussed potential vulnerabilities and attack opportunities for modern PLCs, i.e. PLCs designed and produced after the Stuxnet attack in 2010. One such modern PLC is the Siemens SIMATIC S7-1500, for which they demonstrated a controlled brute force password cracking attack to gain access to the PLC, and a controlled DoS attack that forced the PLC to stop reacting. The demonstration focused on how to circumvent security measures and what an attacker can do once these measures have been circumvented.

## **5. OEM Security Initiatives**

The OEM security initiative is a new focus area for the committee, which until now has focused on the relationship between the operators and the drilling contractors and on supporting the drilling contractors in addressing the various security needs from the operators.

The OEM security initiative was kicked-off by two presentations: Tommy Evensen from MHWirth and Hans Olav Aske from NOV. Tommy Evensen gave an overview of the cybersecurity program and activities at MHWirth, focusing on how they build security into their products and the security services offered to their customers. Hans Olav Aske walked the meeting through how NOV thinks about cybersecurity, their collaboration with various drilling contractors and operators, such as Equinor, and their security activities and services, including principles for network segmentation. Both presentations generated great interest and discussions that will be followed up in later committee meetings.

## **6. Network Segmentation Guidelines**

The committee co-chairs: Juan Negrete and Ben Ramduny, presented status of the network segmentation guidelines. The plan is to have a draft ready for review by end of August/beginning of September.

**7. AOB and close of meeting.** The committee meetings are announced on the IADC website. Please remember to register. The next committee meeting is August 29 at IADC Headquarters in Houston, TX.

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

- December 2019 - Guidelines for Network Segmentation.
- July 2020 – Cybersecurity Training v1.0.
- December 2020 – Guidelines for Hardening of Control Systems.
- July 2021 – Guidelines on Security Monitoring and Audit.

There were no other business and meeting adjourned.