

International Association of Drilling Contractors



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

Attendance

Name		Company Name
Ernesto	Espinoza	MHWIRTH
Bernard	Gloris	Weatherford Oil Tool GMBH
Philippe	Herve	SparkCognition
Siv Hilde	Houmb	Secure-NOK
Mike	Killalea	IADC
Steven	Ronan	Northwest Technical Solutions
Rainer	Ruehmann	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. Walkthrough of Guidelines for minimum cybersecurity requirements for drilling assets
6. AOB and close of meeting

Minutes:

1. Welcome and short introduction of the participants – “round around table”.

International Association of Drilling Contractors

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/>. There were no comments to the minutes from the last IADC ART Cybersecurity Subcommittee meeting (Sept 1, 2016).
4. Update on Legislative and Standardization Activities from Melissa Mejias

Oil and Natural Gas Sector Coordinating Council (ONG –SCC) **November 1&2**

- Action items and upcoming events
 - Meet with RADM Thomas to discuss USCG cybersecurity activities and Final TWIC reader rule.
 - Plan, organize resources, and set date (January) for second ONG educational session at DOE. On September 23, the ONG SCC held the first DOE educational session, which included a brief overview of how the industry works – from production to distribution.
 - The ONG SCC will look into developing a common information sharing protocol to facilitate sharing between ISACs.
 - The ONG SCC will assemble a task group with the ISACs, DOE, and DHS to discuss dissemination of timely and essential information.
 - The ONG SCC will work with DHS and Genscape on the best way to contact companies directly about monitoring activities.
 - Genscape - provides energy market data and intelligence across the oil, power, natural gas and LNG, agriculture, petrochemical and NGLs, maritime,

DHS / USCG

- USCG released Bulk Liquid Transfer Framework Profile document during the API cybersecurity conference in Houston (last week).

Hill Activities

- Energy & Commerce House Hearing: Understanding the Role of Connected Devices in Recent Cyber Attacks – Wednesday, November 16 @ 10 am
- Oversight & Government Reform House Hearing: Federal Cybersecurity after the OPM Data Breach: Have Agencies Learned their Lesson? - Wednesday, November 16 @ 10 am

International Oil and Gas Producers (IOGP) Security Committee **November 14 & 15**

- IOGP is developing a position paper on Information Security in which they welcome the participation from IT personnel from IADC and API member companies to participate.

Industry

Wednesday, October 26, 2016

- API/IADC Cyber Safety Working Group – Kick off meeting

API and IADC convened an initial conversation with representatives from our member companies that have responsibility for ICS/OT business continuity, i.e., what the Coast Guard calls “Cyber Safety” – keeping digitally controlled systems running well.

The objective of the call: to review the concerns of Coast Guard and BSEE policy makers and put our heads together to begin to draft a one-pager that describes API and IADC member company approaches to “Cyber Safety.”

Meeting outcome/action items:

Aaron Padilla and Melissa Mejias will begin drafting a one or two page document to address the common approach in which API and IADC member companies manage cyber safety/hygiene as it relates to what

International Association of Drilling Contractors

the USCG has jurisdiction over. This covers a range of things – resilience of systems, operational neglect, software/hardware connectivity, maintenance of automation systems, etc. The API and IADC member companies will have a chance to review the draft document once completed. Right now, we are asking member companies to provide us source material for the draft (i.e. Scott’s presentation from the IADC World Drilling Conference, internal mapping documents – what is done alongside NIST, etc.).

It was also discussed that the next meeting should convene early next year, after the next IADC cybersecurity subcommittee meeting on November 15. It was suggested that IADC and API combine cyber committee meetings sometime around the next schedule API cyber committee meeting in February 2017.

6. Walkthrough of Guidelines for minimum cybersecurity requirements for drilling assets

[Please see appendix to minutes](#). Guidelines document is in review and “final” version to be presented to the meeting January 12, 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 2017 are the following:

- January 12, 2017 @9am
- March 9, 2017 @9am
- May 11, 2017 @9am
- July 13, 2017 @9am
- September 14, 2017 @9am
- November 16, 2017 @9am

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

- December 2016 – Guidelines for Minimum Cybersecurity Requirements for Drilling Assets.
- December 2016 - Guidelines for Network Segmentation.
- December 2016 – Cybersecurity Training v1.0.
- June 2017 – Guidelines for Hardening of Control Systems.
- December 2017 – Guidelines on Security Monitoring and Audit.

There were no other business and meeting adjourned.

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	Siv and all.	First round of assessment completed

International Association of Drilling Contractors

	and ISA/IEC 62443-3-2.		and presented to the meeting Jan 21, 2016. The risk assessment results are revised continuously and the target date for closing the document is December 31, 2016.
03	Guidelines for Network Segmentation.	Nathan Moralez (BP), ? (Maersk) and Siv.	Dec 31, 2016.
04	Evaluate alternatives for collecting and publishing relevant cybersecurity information (vulnerabilities, top 10 threats, etc.).	Siv and Linda Hsieh (IADC) (coordinate with Mike Killelea (IADC)).	Jan 12, 2017.
05	Develop block diagram or similar of Drilling Asset (expand on the diagram used for the risk assessment example (AP 02)).	John Jorgensen (ABS) and Siv.	TBD
06	Cybersecurity Training v1.0.	Greg Villano (Diamond) and Wesley Knight (Diamond).	Dec 31, 2016.
07	Guidelines for Minimum Cybersecurity Requirements for Drilling Assets.	Siv and all.	Dec 31, 2016.
08	Communicate and coordinate with API regarding Cyber Safety.	Melissa Meijas (IADC)	Ongoing.
09	Communicate and coordinate with US Coast Guard regarding minimum cybersecurity requirements.	Melissa Meijas (IADC)	Ongoing.
10	Communicate with operators regarding the minimum cybersecurity requirements.	Robin Macmillan (NOV) and Nina Tvedt (Noxa).	Jan 12, 2017.