International Association of Drilling Contractors

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

Attendance

Name		Company Name
Chris	Owsianiecki	**AMARITIME ADMINISTRATION - MARAD**
David	Wagner	**AWC INC**
Nathan	Moralez	**BP**
Keith	Frederick	**COMPUTER NETWORK ASSURANCE**
David	Zacher	**DELOITTE**
Gregory	Villano	**DIAMOND OFFSHORE**
Allen	Prescott	**DNV GL**
Mike	Killalea	**IADC**
Melissa	Mejias	**IADC**
Richard	Parliman	**LLOYD'S REGISTER DRILLING INTEGRITY SERVICES**
Julie	Snyder	**MITRE**
Robin	Macmillan	**NATIONAL OILWELL VARCO**
Thomas	Bui	**PACIFIC DRILLING SERVICES**
Joseph	Effinger	**PACIFIC DRILLING SERVICES**
Roger	Hofmann	**PACIFIC DRILLING SERVICES**
Stefan	Zak	**ROCKWELL AUTOMATION**
Tom	Horan	**ROWAN COMPANIES PLC**
Siv Hilde	Houmb	**SECURE-NOK LLC**
Nina	Tvedt	**SECURE-NOK LLC**
Philippe	Herve	**SPARKCOGNITION**

Agenda for the meeting:
1. Welcome and Introductions
2. Review of Antitrust Guidelines and Facility Orientation
3. Review of Minutes from Last Meeting
4. Orientation on DHS / US Coast Guard / NIST / API / etc. activities on cybersecurity – Melissa Mejias (IADC)

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5. Presentation on Oil and Natural Gas Information Sharing and Analysis Center - ONG-ISAC
6. Walkthrough of Guidelines for minimum cybersecurity requirements for drilling assets
7. 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.

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 (July 7, 2016).

4. Orientation on DHS / US Coast Guard / NIST / API / etc. activities on cybersecurity – Melissa Mejias (IADC).

Melissa introduced the two guest speakers: Christopher Owsianiecki from MARAD and Julie Snyder from MITRE.

Christopher Owsianiecki is a Maritime Security Specialist at the Maritime Administration, Office of Maritime Security (MAR-420), U.S. DoT. Chris informed the meeting about the efforts on coordinating and aggregating cybersecurity information into a one-stop portal. This has been an ongoing effort for the last 2 years and within a few months the portal will be launched. In this work it has been crucial to communicate with the industry and to solicit their feedback.

Julie Snyder is a Lead Information Security & Privacy Engineer/Scientist at MITRE and the lead editor of the Maritime Bulk Liquids Transfer Cybersecurity Framework Profile on behalf of the U.S. Coast Guard. The profile will be the first NIST Cybersecurity Profile published from the U.S. Coast Guard and is according to their Cyber Strategy. The next profile that is planned is the MODU profile.

5. Presentation on Oil and Natural Gas Information Sharing and Analysis Center - ONG-ISAC
David Zacher is the Executive Director of the ONG-ISAC. David gave a short introduction to the ONG-ISAC and their purposes, core tasks and work processes. Please see the enclosed presentation for details.

6. Walkthrough of Guidelines for minimum cybersecurity requirements for drilling assets
Deferred to next meeting.

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 2016 are the following:

 • November 15, 2016

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.

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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 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), Robert Frandsen (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)).	Nov 15, 2016.
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.	Nov 15, 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).	Nov 15, 2016.