

Advanced Rig Technology

Cybersecurity Subcommittee

12-13 Jan 2017

IADC 10370 Richmond Ave., Suite 760 Houston, TX 77042

Attendance

Name		Company Name
Cris	DeWitt	ABS
Allen	Steagall	AESOLUTIONS
Michael	Behounek	APACHE CORPORATION
Robert	Gomez	ATWOOD OCEANICS, INC.
Enyel	Perez	ATWOOD OCEANICS, INC.
Nathan	Moralez	ВР
Calvin	Holt	CHEVRON
Michael	Lewis	CHEVRON
Cherise	Gutierrez	CYBER THREAT BE GONE
Gregory	Villano	DIAMOND OFFSHORE DRILLING
Wesley	Knight	DIAMOND OFFSHORE DRILLING
Chris	Boylan	DNV GL
David	Card	DNV GL
Clifford	Donald	GE OIL & GAS
Melissa	Mejias	IADC
Alan	Spackman	IADC
Mike	Killalea	IADC
Karsten	Rosgaard	MAERSK DRILLING
Ernesto	Espinoza	MHWIRTH
Julie	Snyder	MITRE
Pradeep	Annaiyappa	NABORS DRILLING

Steven	Hengel	NATIONAL OILWELL VARCO	
Catherine	Cavazos	NATIONAL OILWELL VARCO	
Nahum	Ronquilo	NATIONAL OILWELL VARCO	
James	Cooper	NATIONAL OILWELL VARCO	
Robin	Macmillan	NATIONAL OILWELL VARCO	
David	Weitzel	NCCOE/MITRE	
Steven	Ronan	NORTHWEST TECHNICAL SOLUTIONS	
Michael	Garcia	ROWAN COMPANIES	
Siv Hilde	Houmb	SECURE-NOK LLC	
Nina	Tvedt	SECURE-NOK LLC	
Philippe	Herve	SPARKCOGNITION	
Trenton	Martin	TRANSOCEAN	
Jason	Warren	UNITED STATES COAST GUARD	
Gene	Sykes	USCG	
Kyle	Carter	USCG	
German	Lara	WARTSILA NORTH AMERICA, INC	

Agenda for the meeting:

Time	Topic	Lead		
Thursday, January 12, 2017				
9:00 – 9:05	Welcome, Introduction, Facilities Orientation and IADC Antitrust Guidelines	Siv, Mike		
9:05 - 9:30	Objectives of the Profile work, generally and for MODU	Jason		
9:30 – 10:00	Industry Input	Siv		
10:00 – 10:30	Cybersecurity Framework Overview	Dave		
10:30 – 10:45	Break			
10:45 – 11:15	Cybersecurity Framework Profile Development Process	Julie		
11:15 – 11:45	Path Forward for MODU Profile	Julie		
11:45 – 12:45	Break for Lunch			
12:45 – 2:15	Discussion of MODU Mission Objectives	Jason, Julie, Dave		
2:15 – 2:30	Break			
2:30 - 3:30	Discussion of MODU Mission Objectives (continued)	Jason, Julie,		

		Dave		
3:30 - 4:00	Introduction to Category Prioritization	Jason, Julie,		
		Dave		
4:00 – 4:10	Setup for Friday	Jason		
Friday, January 13, 2017				
8:30 - 8:35	Welcome, Introduction, Facilities Orientation and IADC Antitrust	Siv, Mike		
	Guidelines			
8:35 – 10:15	Framework Category Prioritization	Jason, Julie,		
		Dave		
10:15 – 10:30	Break			
10:30 – 11:30	Framework Category Prioritization (continued)	Jason, Julie,		
		Dave		
11:30 – 12:15	Discussion of overall MODU Profile needs (e.g., resources to	Julie		
	consider, information needed to be a stand-alone resource,			
	observations based on the MBLT CFP)			
12:15 – 12:30	Wrap-up	Jason or Julie		

Minutes:

- 1. Welcome and short introduction of the participants "round around table". Meeting delegates was reminded of the IADC antitrust guidelines. Please also note that minutes from the subcommittee meetings are posted at: http://www.iadc.org/advanced-rig-technology-committee/meeting-minutes/.
- 2. The meeting was organized as a joint meeting between IADC, the U.S. Coast Guard (USCG) and National Institute of Science and Technology's (NIST) National Cybersecurity Center of Excellence (NCCoE). The meeting also had participants representing American Petroleum Institute (API). The purpose of the meeting was for the industry to provide input to the ongoing work on developing a Mobile Offshore Drilling Unit (MODU) cybersecurity profile. The MODU profile is one of five cybersecurity profiles planned developed by the USCG. The basis for all these five profiles is the NIST Cybersecurity Framework, which was first published February 2014, and is currently undergoing revision (see separate note from IADC on providing input to the published revised framework draft). The first profile published by USCG was the Bulk Liquid Transfer Profile

(<u>https://www.uscg.mil/hq/cg5/cg544/docs/Maritime_BLT_CSF.pdf</u>). This profile was published November 2016. The members should note that these profiles are intended as voluntary guidance.

As the meeting was the kick-off for the joint work between industry and USCG on the MODU profile, the focus was on identifying mission objectives and on assigning and prioritizing cybersecurity categories according to NIST Cybersecurity Framework to each of the mission objectives. The meeting identified the following 10 mission objectives:

- 1. Maintain Personnel Safety
- 2. Maintain Environmental Safety
- 3. Maintain Reliability
- 4. Maintain Continuity of Ops and Availability
- 5. Maintain Cyber/Situational Awareness
- 6. Maintain Personnel Competencies

- 7. Maintain Continuity of Stakeholder Communications
- 8. Maintain Operational Efficiency
- 9. Maintain Secure Communications
- 10. Maintain Regulatory Compliance

Details and description of both the mission objectives and the identified and prioritized cybersecurity categories are given in a separate note from IADC, along with details from the mission objective elicitation process and a form for the IADC members to provide input and feedback to the results from the meeting.

Please note the deadline for providing input and feedback, which is February 15, 2017. Please see separate note from IADC for instructions.

Day 1 of the meeting concluded with a list of 10 mission objectives and a draft-prioritized list of cybersecurity categories for each. These were revised on Day 2 of the meeting.

3. AOB and close of meeting. There were no other business and the meeting was adjourned.

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:

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

Please note that the March 9 meeting will host representatives from NIST NCCoE and focus on: (1) discussion of industry use cases for cybersecurity, and (2) discussion on the revised version of the NIST Cybersecurity Framework. Please see separate note from IADC for details.