

International Association of Drilling Contractors



ART Drilling Control Systems CyberSecurity Task Group Meeting

20 November 2014
9 – 11 am

IADC
10370 Richmond Ave., Suite 760
Houston, TX

Agenda for the meeting:

1. Welcome and Introductions
2. Review of Antitrust Guidelines and Facility Orientation
3. Feedback on the IADC Drilling Control Systems Cybersecurity Workshop
4. Status on Risk assessment and standards and methods work task
5. OWASP
6. Standards analysis – next steps
7. Next meeting schedule and AOB

Minutes:

1. Welcome and short introduction of the participants – “round around table”.
2. Meeting delegates was reminded of the IADC antitrust guidelines.
3. The IADC Drilling Control Systems Cybersecurity Workshop organized October 9, 2014, had a good representation from the OT domain (more than 70%). The workshop survey provided good input to the groups work on developing a recommendation for risk assessment standard and method to use when assessing DCS and drilling assets. There has also been expressed interest in a follow-up workshop focusing on cybersecurity in the supply chain.
4. The meeting agreed on an approach to compile and review the recommendation document on risk assessment standards and methods. The process is as following:
 - Siv to put together the ToC based on the discussion and agreement at the meeting (Annex A in this document)
 - ToC to be reviewed by group members. Feedback must be sent to Siv before December 3.
 - Draft document sent for review by Siv on December 8.
 - Review comments to be sent to Siv by December 11.
 - Group meeting to agree and approve document December 12.
5. Presentation and discussion of OWASP and the idea of developing and maintaining a top-10 risks/threats/vulnerabilities for drilling assets (DCS) is postponed to the first group meeting in 2015.
6. The next steps in the standards analysis is to go back to the current status of the analysis, which was presented in the online group meeting August 21, 2014, and re-prioritize focus areas. This will be discussed in the first group meeting in 2015. The current focus is on completing the first draft of the risk assessment standards and methods for DCS draft recommendation document.

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7. The next group meeting is scheduled for Friday December 12, 2014 @10:30am–11:00am. This will be an online meeting only. The purpose of this meeting is to provide feedback on the draft risk assessment standards and methods recommendation document. The draft document will be sent out for review December 8, 2014. Please note that for this meeting to be efficient it is important that everybody provide input prior to the meeting in written form using the provided template. The feedback template will be made available at the same time as the draft document (December 8, 2014).

AP no.	Description	Responsible	Deadline
01	List categories/parameters/attributes relevant for assessing cybersecurity risks of DCS from a business perspective and send the list to Siv.	Kent Hulick	Closed
02	List categories/parameters/attributes relevant for assessing cybersecurity risks of DCS from a HSE perspective and send the list to Siv.	Nathan Moralez	Done & Closed
03	Distribute combined list of categories/parameters/attributes for assessing cybersecurity risks for DCS.	Siv Hilde Houmb	Closed (embedded in AP 04)
04	Identify and evaluate relevant risk assessment standards and methods.	Cris DeWitt, Matthew Romero, Siv Hilde Houmb	December 12, 2014
05	Prepare presentation of OWASP, including the procedure for identifying and updating the top-ten risks.	Siv Hilde Houmb	Done & Closed – new AP to be raised after new years.
06	Prepare presentation of findings thus far for the standards analysis (overview of relevant standards for DCS cybersecurity).	Siv Hilde Houmb	Done & Closed
07	Workshop program for IADC Drilling Control Systems Cybersecurity Workshop - October 9.	Siv Hilde Houmb (supported by Nathan Moralez, Trent Martin, Cris Dewitt, and Scott Maddox)	Done & Closed

Note that we will update the AP list at the first group meeting in 2015.

Annex A:

ToC – Risk assessment standard and methods recommendation document

- Executive summary
High-level description of how to perform a risk assessment on DCS, the recommended standards and methods to follow and use, and why the industry should adopt these standards and methods.
- 1. Introduction and Motivation

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Short background information and motivation for the document; e.g. describing why it is important that the industry agree on and follow the same standards and methods when assessing cybersecurity risks.

This section will also describe the CybSec group, its objectives, and goals.

2. Risk Assessment Standards – Recommendations

2.1. American Risk Assessment Standards

Short overview of NIST Cybersecurity framework and NIST Risk management standard.

2.2. International Risk Assessment Standards

Short overview of ISO 27001, ISO 27002, ISO 27005, and ISO 31000.

2.3. Comparison of American and International Risk Assessment Standards

Outlining the differences between the American and International standards and what this means in practice when assessing cybersecurity risks of DCS.

3. Risk Assessment Methods – Recommendations

ISA99 WG4 objective is to: Identify, define and develop the technical requirements for Security for Industrial Automation and Control Systems (IACS) at both the system and component level.

ISA99 WG4 TG3 is about to complete a new standard that focuses on risk assessment methods to use for identifying and addressing cybersecurity risks in zones and conduits in IACS. The standard being developed are: ISA/IEC 62443-3-2: Security Assurance Levels for Zones and Conduits. The standard is planned to be sent out for ballot before Christmas. This standard is adapting the HAZOP method described in ISA/IEC 61882 for cybersecurity assessment of IACS. This fits very well with the feedback on the risk assessment standards and methods question in the survey from the IADC Drilling Control Systems Cybersecurity Workshop.

The recommendation will include the suggestion from the group on assessing impact according to the following parameters: HSE: Health and Safety, HSE: Environment, HSE: Financial, Operational Cost, Business Cost, Business Continuity.

The recommendations will also include the suggestion from the group of a flow chart outlining what method and activities to perform for new rigs and existing rigs and different type of rigs related to the following cybersecurity paradigms: Prevention, Detection, and Response.

4. Summary and Conclusions

Short summary of the purpose of the document, descriptions of the need for recommendations on risk assessment standards and methods, a short overview and comparison of American and International risk assessment standards, and a short summary of the recommended risk assessment method to use for assessing cybersecurity risks of DCS.

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Attendance:

Name		Company Name
Pradeep	Annaiyappa	Canrig
Carmen	Babin	Cameron
Patric	Dove	Siemens
Clint	Dunn	Lloyd's Register Energy-Drilling
Jan-Tore	Ervik	DNV-GL
Trenton	Martin	TRANSOCEAN
Nathan	Moralez	BP
Eric	Milne	Northwest Technical Solutions
Jay	Labhart	GE Oil & Gas
Richard	Parliman	Lloyd's Register Energy-Drilling
Richard	Wilson	ABS