

# International Association of Drilling Contractors



**Drilling Controls Systems Subcommittee  
IADC Advanced Rig Technology Committee  
09.00-09.30 Friday, 18 January 2019  
Online meeting, Drilling Rig Control Systems Minimum Safety  
Features working group**

## Minutes

DCS Subcommittee Chairman Nathan Moralez, BP, opened the meeting and welcomed the participants.

This meeting kicks off work to draft guidelines for Drilling Rig Control Systems Minimum Safety Features, applicable to both land and offshore. The working group will take the same approach to drafting this guideline as the Cybersecurity Committee (then the ART Cybersecurity Subcommittee) did to draft their guidelines. The working group will review internationally recognized machine safety and process safety standards from which recommendations can be drawn and applied to drilling.

Ernesto Espinoza (MHWirth), Travis McGuire (Transocean), Andrew Zheng (Schlumberger) and Chris Corcoran (ABS) volunteered to undertake an initial review of internationally recognized standards.

The group then reviewed the proposed outline for the guidelines and recognized that the guidelines would focus on software, rather than electrical/mechanical interaction. The Internal Machine Interlocks chapter will focus on how the machine software protects itself from damaging itself. The Process Interlocks chapter will focus on how the machine interacts with other machines during a process. Collision avoidance is similar but focused solely on not allowing two machines to collide. Lock-out/tag-out was combined with the chapter on Recommended Safety Practice for Bypassing. It was determined that after initial drafts are in place, the group could revisit the topic of how to divide the content into different chapters.

Chapters were assigned to the following volunteers for initial drafting:

- Introduction (Ernesto Espinoza, MHWirth)
- Emergency Stops (Don Crouch, Lloyd's Register)
- Internal Machine Interlocks (Ernesto Espinoza, MHWirth)
- Process Interlocks (Chris Price, Pioneer Energy Services)
- Collision Avoidance (Andrew Zheng, Schlumberger)
- Recommended Safety Practice for Bypassing & Lock-out/Tag-out (Andrew Zheng, Schlumberger)
- Human Machine Interaction (Robert van Kuilenburg, Noble Corp)

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- Conclusion (Nathan Moralez, BP)

The group also agreed to meet every three weeks at 9am Fridays, via Skype. The next meeting will be on 8 February.

There being no other business, the meeting was adjourned.