

International Association of Drilling Contractors



**Drilling Controls Systems Subcommittee
IADC Advanced Rig Technology Committee
09.00-09.30 Friday, 8 February 2019
Online meeting, Drilling Rig Control Systems Minimum Safety
Features working group**

Minutes

Chris Price, Pioneer, opened the meeting and welcome the participants on behalf of DCS Subcommittee Chairman Nathan Moralez, BP.

The group reviewed work on each section as assigned during the previous meeting:

- Introduction (Ernesto Espinoza, MHWirth) – no progress yet
- Emergency Stops (Don Crouch, Lloyd's Register) – Don was not on the call
- Internal Machine Interlocks (Ernesto Espinoza, MHWirth) – Ernesto hopes to have something to share with group by next week
- Process Interlocks (Chris Price, Pioneer Energy Services) – no progress yet but should have something to share with group next week, seeking guidance on format
- Collision Avoidance (Andrew Zheng, Schlumberger) – outline created of subsections (Collision and Risk Identification; Position and Zone Definition; Tracking Change of Position; Provide Collision Avoidance Control; Fail-safe Design); also seeking guidance on format
- Recommended Safety Practice for Bypassing & Lock-out/Tag-out (Andrew Zheng, Schlumberger) – no progress yet
- Human Machine Interaction (Robert van Kuilenburg, Noble Corp) – found research from December 2016 from Ocean Energy Safety Institute, "Human Factors and Ergonomics in Offshore Drilling and Production: The Implications for Drilling Safety," which will be used for this section; also found ISO 11064, "Ergonomics Design of Control Centres," which also may be useful; so far, research has shown there is a big gap between existing recommendations on HMI and what we have in current drilling control systems; Robert hopes to have something in writing by end of next week
- Conclusion (Nathan Moralez, BP) – Nathan was not on the call

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Robert van Kuilenburg mentioned it's worth looking at the work done by Robotic Drilling Systems and how they're applying technology from the automobile industry to program machines for drilling.

Ernesto Espinoza (MHWirth), Travis McGuire (Transocean), Andrew Zheng (Schlumberger) and Chris Corcoran (ABS) volunteered to undertake an initial review of internationally recognized standards. **Update:** The group will begin sharing with each other various industry standards as they become known and begin compiling a list that can be used as a reference in this guideline.

The group's next meeting will be on 1 March.

The meeting was adjourned.