# Collision Avoidance Sub-Committee
## 3rd October 2019

Steve Sawaryn

Wellbore Positioning Technical Section

ISCWSA

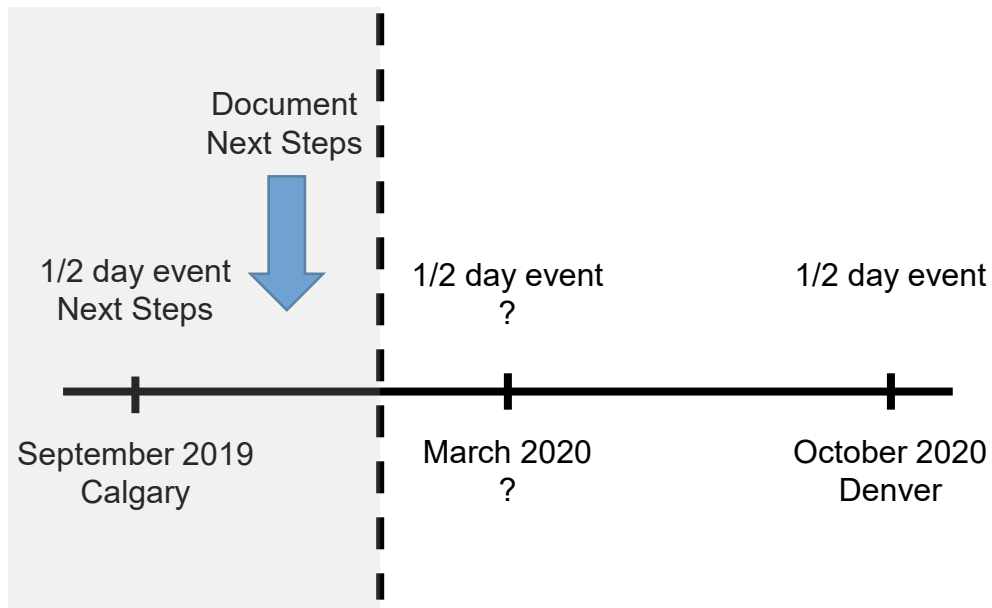The Industry Steering Committee on Wellbore Survey Accuracy (ISCWSA)

# Agreed Focus Areas

- Development of a Collision Avoidance Management Presentation Pack
- Development of a common Collision Avoidance Report and Electronic Exchange
- Adoption of the Global Error Model terms
- Establish and document a revision control process and administration (including CA bibliography)
- Communication
- Error Models / Collision Avoidance / Data QA/QC relationship

50th General Meeting
October 3rd, 2019
Calgary, Canada

Wellbore Positioning Technical Section

ISCWSA
The Industry Steering Committee on Wellbore
Survey Accuracy (ISCWSA)

# Slide Pack (Plus U-Tube Video?)

1. Legitimising the proposal – ISCWSA
2. Why collision avoidance is important
3. Why having an industry is important
4. Why this rule?
5. Causes of collisions (none due to the rule)
6. Results in SF, based on SF
7. Well classification HSE / non-HSE
8. Comparison slide, Table 1
9. The rule details
10. Position uncertainty
11. The Ask (What we want you to do)
12. Conclusion

50th General Meeting
October 3rd, 2019
Calgary, Canada

Wellbore Positioning Technical Section

ISCWSA
The Industry Steering Committee on Wellbore
Survey Accuracy (ISCWSA)

# Timeline

Document
Next Steps

1/2 day event
Next Steps

1/2 day event
?

1/2 day event

September 2019
Calgary

March 2020
?

October 2020
Denver

ISCWSA

The Industry Steering Committee on Wellbore
Survey Accuracy (ISCWSA)

# Progress / Adoption of CA Rule

- ISCWSA Members – broad range of adoption and testing across both operators and service companies
- Caution reflects the advice that adoption may be a challenge for all organisations, whether their existing CA rule is more or less conservative than the recommendation
- Legislative Bodies (e.g State of Ohio )
- Standards Organisations – plans have advanced to complete the first draft of the API RP 78 document by the next ISCWSA meeting

50th General Meeting
October 3rd, 2019
Calgary, Canada

Wellbore Positioning Technical Section

ISCWSA
The Industry Steering Committee on Wellbore
Survey Accuracy (ISCWSA)

# Other Actions

- Develop draft of the standard CA report (March 2020)
- Investigate tie-in mode for the ISCWSA sidetrack example (March 2020)
- Intend in-depth discussions of collision example with associated root cause analysis and some future date (6-12 months)
- Invite Human Factors expert to assist with analysis of the example
- Discuss collaboration required with Data Quality Assurance / Quality Control recognising this is key foundation for CA
- Develop an updated list of CA related papers, differentiating between peer approved and non-peer approved (March 2020)
- Finalise the CA Slide Pack (March 2020)

50th General Meeting
October 3rd, 2019
Calgary, Canada

Wellbore Positioning Technical Section

ISCWSA

The Industry Steering Committee on Wellbore Survey Accuracy (ISCWSA)

# BLANK

# Outline Agenda
## Wednesday 4th October

| From | To | Description |
|------|-----|-------------|
| 13.00 | 13.15 | Introductions and Status |
| 13.15 | 14.30 | Work Session 1 – Discussion: CA Rule Adoption |
| 14.30 | 14.45 | Break |
| 14.45 | 15.45 | Work Session 2 – Case History (Bill Allen) |
| 15.45 | 16.45 | Work Session 3 – Unallocated / Adjustments |
| 16.45 | 17.00 | Summary & Wrap-Up |

50th General Meeting
October 3rd, 2019
Calgary, Canada

Wellbore Positioning Technical Section

ISCWSA
The Industry Steering Committee on Wellbore
Survey Accuracy (ISCWSA)

# The Hague: March 2019 – Groups

**Group 1: Error Models / CA**

1. Scope
2. x
3. x

**Group 2:  CA Presentation Pack**

1. Pete  Clark's material
2. SPE 184730 and SPE 187073
3. Other?

**Group 3: CA Report & Data X**

1. x
2. x

**Group 4: Revision Control**

1. Bibliography (2010)
2. Format (single document)
3. x

50th General Meeting
October 3rd, 2019
Calgary, Canada

Wellbore Positioning Technical Section

ISCWSA

The Industry Steering Committee on Wellbore
Survey Accuracy (ISCWSA)

# Common Collision Avoidance Report

Flagged as a high priority item. The following notes were taken from the workgroup's flipchart. Currently all-encompassing and further work and refinement is required.

- Data file
  - o Planning and execution phase
  - o Different user levels
  - o Able to reconstruct calculations
- Common data standard, version
- Version (and time/data), Audit Trail (and time/data), User ID
- Geomatics
- SF, MASD, ADP and probability
- Surveying Program, Error Models, QA/QC
- Rule
- Activity; status on reference well (depth)
- Reference information, wellhead, vertical reference (all relative to reference well)
- Offset well identity, status and assessed risk (HSE/Non-HSE)
- Review/Approval
- Users Green/Red, AI, full replication

ISCWSA

The Industry Steering Committee on Wellbore
Survey Accuracy (ISCWSA)

# Inverness April 2018 – Notes+

1. Adoption of the ACR?
2. Manage the CA recommendations
   1. Convert documents to a single document (as Error Model Group do)?
   2. Manage revisions, no more than annually?
   3. Relationship with API RP 78?
3. Adoption of the Global Error Term

50th General Meeting
October 3rd, 2019
Calgary, Canada

Wellbore Positioning Technical Section

ISCWSA

The Industry Steering Committee on Wellbore
Survey Accuracy (ISCWSA)