

ISCWSA / SPE Wellbore Positioning Technical Section

Collision Avoidance Work Group

15th meeting, SPE Annual Technical Conference and Exhibition, New Orleans, 2nd October 2013

MINUTES OF MEETING

- S. Sawaryn chaired the sub-committee for the first time and thanked Harry Wilson for his efforts, leading the group over the last 7 years.
- The WBPTS collision avoidance work group summarised its achievements over the last 5 years and agreed its priorities and focus for 2014 / 2015.

What has been delivered?

1. Lexicon (positional uncertainty and collision avoidance)
2. Bibliography
3. Current common practice (recently republished).
4. Recommendations against dispensation of HSE risk Minimum Allowable Separation Distance.
5. Set of wells that can be used to test collision avoidance rule recommendation
6. Inclination-only error model
7. Evaluation of distributions (cf. normal distribution, being continued by Statoil as company effort).

This activity has led to significant growth of documented good practice. It was agreed that the workgroup review documents annually.

What is being worked on?

- The Fundamentals of Successful Well Collision Avoidance Management. **Action: Harry send Bill Allen (Complete)**
- Lexicon (Minor Update) **Action: Pete Clark**
- Bibliography (Minor Update) **Action: Avinash**
- Recommendations against dispensation of HSE risk Minimum Allowable Separation Distance (MASD) requires modification of the last paragraph. **Action: Harry Wilson / Erik Nyrnes (Complete)**
- Set of wells that can be used to test collision avoidance rule recommendation. A new well has been added, awaiting for feedback prior to publishing, **Action: Andy Sentence (Complete)**
- How to implement collision avoidance in software (extend common practice). **Action: Pete Clark / Harry Wilson (Move to Collision Avoidance Discussions)**

What are the important deliverables for the next two years?

1. When business partner does collision avoidance scan, assurance that SF is acceptably similar? Create test framework needed. Start by creating index.
2. Define what are the safety critical components related to the collision avoidance activities? (Are these identified in the Lexicon?) Add to the collision avoidance document?
3. Describe the assurance mechanisms and tools
4. General expectation for the collision avoidance process – what is it? Roles and responsibilities?
5. Tolerable collision risk definitions and process, consistency over the industry. Criteria of minimum competence to do a HSE risk for collision risk activity.
6. Comparison of different collision avoidance methods, advantages and disadvantages. (Can we get to a unified collision rule). Huge economy if we can agree, as well as the added assurance. (Expanded ellipses, relative uncertainty)
7. Facilitated implementation of software for the above recommended methods.
8. Evaluation of distributions (cf. normal distribution, being continued by Statoil as company effort)
9. Standard content (and format) for collision avoidance report. **Action: Kevin McLard**
10. Standardised document for all ISCWSA document and version numbers (General Section Activity).

The workgroup recognised that its aspirations are limited by the resources available, and prioritisation is needed. The agreed priorities are items 6, 1 and then 4.

- (Item 6) Comparison of different collision avoidance methods, advantages and disadvantages. (Can we get to a unified collision rule). Huge economy if we can agree, as well as the added assurance. (Expanded ellipses, relative uncertainty) **Action: Steve / Avinash / Dalis**
- (Item 1) When business partner does collision avoidance scan, assurance that SF is acceptably similar? Create test framework needed. Start by creating index. **Action: Pete Clark / Simon McCulloch**
- (Item 4) General expectation for the collision avoidance process – what is it? Roles and responsibilities? **Action: Roger Goobie**

Communications

How do we spread the word more widely than the existing membership?