

Independent Verification and Validation of Sensors and Systems in Drilling

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Stage I: Identification and prioritization of sensors / systems benefitting from IV&V, one proof of concept of IV&V application

Key aspects this JIP

- Objective: Verification and validation of data in situ on drilling operations
 - Applicable standards will be used, as appropriate
 - e.g. sensor standards by IEEE
- Purpose: Provide a means to assure data accuracy for critical sensors / systems to achieve acceptable control from manual through various levels of automated drilling and to support data analytics
- Product: An industry Recommended Practice (RP) suitable for use by typical industry participants

Work Plan

- Launching Steering Committee
 - Completing appointments of drilling industry experts / leaders
 - Including representatives of IADC DEC, IADC ART, SPE DSATS, OGDQ, ISCVSA
 - Appoint JIP Funder representatives as funding received
- Identify and classify sensors / systems of interest in drilling
- Prioritize sensors / systems
 - Impact on drilling process
 - Value to drilling process
 - Ease to apply
 - Cost to apply

Work Plan

- Select sensor / system for proof of concept for use of IV&V
- Identify sensor / system experts to consult on the chosen proof of concept
- Develop IV&V proof of concept
- End of Stage I review
 - Present proof of concept for review
 - Present sensor / system ranking
 - Perform stage gate review

The end of Stage I will be a Stage Gate review by the Steering Committee, JIP Funders and IADC DEC to approve or disapprove (with recommendations) to commence Stage II

JIP Progress

- SwRI developing simpler sponsoring agreement
 - Must file with DOJ and FTC
- Proposing 10 funders at \$10,000 each for Phase I – Proof of Concept
 - 2 interested parties so far – 1 DC / 1 Oil Co
 - Actively soliciting funders
- Securing Steering Committee Members
 - Ross Philo – Energistics
 - Adrian Ledroz – Gyrodata / ISCWSA & WBPTS
 - Robert van Kiulenburg – Noble / IADC ART
 - Tony Beebe - Northern Offshore / DSATS
 - Mark Anderson – Shell / DSATS
 - Michael Behounek – Apache / OGDQ
 - Matt Isbell – Hess / OGDQ

Thank you – Contact Info

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