

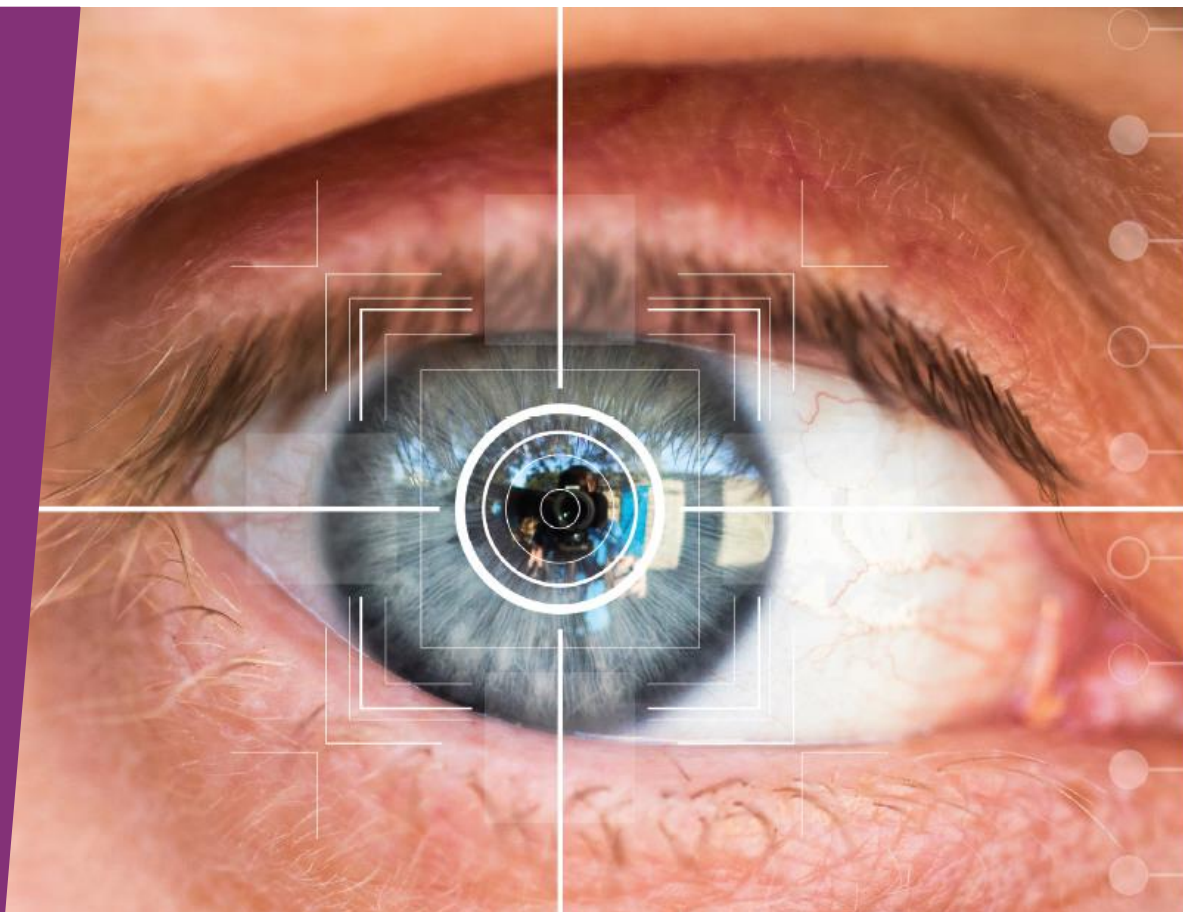


International
Association
of Oil & Gas
Producers

Assessment of eye tacking technology in well control operations

David Lobdell (IOGP)

8th April 2025



Well Competency & Training Subcommittee

The purpose of the Competency and Training Subcommittee is to minimize the impact of global well control events due to operations-related human error.

This involves providing individuals and operations teams in our industry the leadership and guidance to assure development and verification of technical and non-technical competency, including human behaviours.



Eye Tracking (IOGP 656 & 656-1)



Part 1 – Simulator

Improvements such as alarm management, dwell time on gauges, information format on displays, instrumentation groups.



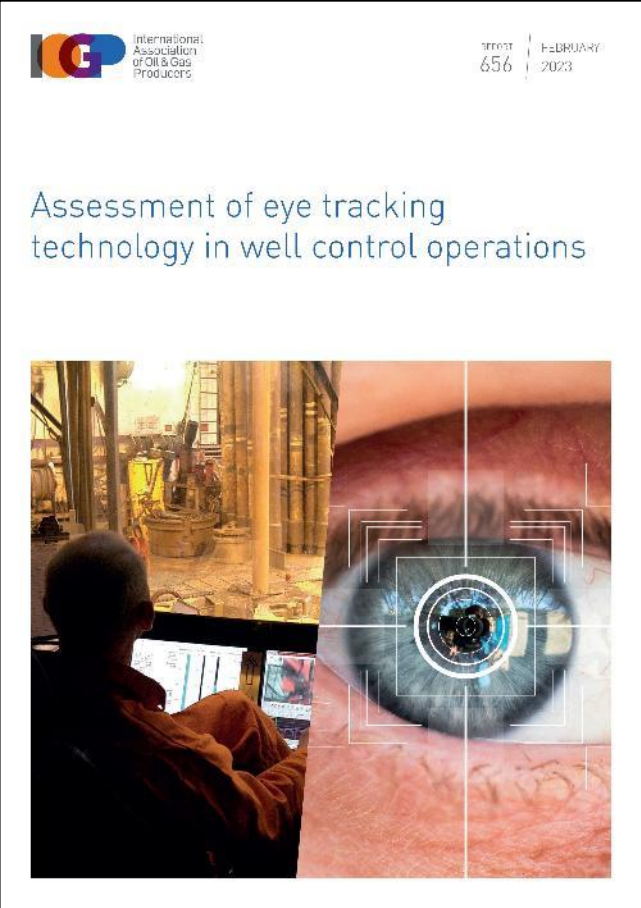
Part 2 – Onshore

Eye tracking studies demonstrate opportunities to improve how information is displayed, screen placement, display hardware functionality & benefits of standardisation.

Eye Tracking Part 1

Drilling Simulator

Purpose	Conduct initial eye tracking in wells operations to determine whether this technology could be relevant to improve our understanding and reduction of risk.
Findings	Improvements such as alarm management, dwell time on gages, information format on displays, instrumentation groups.
Further work	The study found that eye tracking technology is an effective analysis tool and has the potential to be of value in other human performance areas that affect wells operations.



Eye Tracking Part 2

Onshore Rig Environment

Purpose	Research using eye tracking technology to assess design layout of drilling console and instrumentation, allocation of function and cognitive workload placed on the driller.
Findings	Eye tracking studies to date have demonstrated that there are opportunities for improvements in how information is displayed, screen placement, and display hardware functionality, and benefits of standardization.
Further work	Conduct additional studies using eye tracking technology in offshore environments.



Findings



**Human
Performance Issues**



**Human Machine
Interface (HMI)**



Task Load Extremes



Automation



**Multi-Tasking
and Distraction**



Standardisation

Way Forward



Part 3 – Offshore

Eye tracking study
carried out offshore.
Findings being analysed.

Report 656-2 expected
Q2 2025

- IOGP Report 656-2 to be published Q2 2025
- Review the findings and determine next steps
- IOGP will collaborate with industry bodies such as IADC and IWCF as well as Original Equipment Manufacturers (OEMs) and drilling contractors to discuss the recommendations
- No additional Eye Tracking studies are planned within IOGP following the publication of IOGP Report 656-2.