

Enhanced Well Control

IWCF Well Control Workshop – Baku, Azerbaijan



Enhanced Well Control

Overview

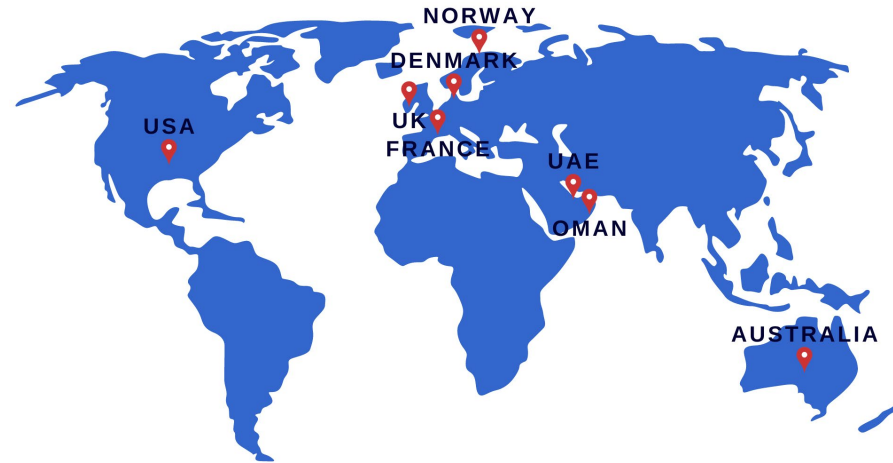
First introduced in 2017 in response to the International Association of Oil & Gas Producers (IOGP), Report 476, Recommendations for enhancements to well control training, examination and certification.

“Enhanced versions of Level 3 and Level 4 are encouraged in order to provide continued deepening of skills towards a mastery level of competency”. IOGP, Report 476, 2023.

Since 2018:

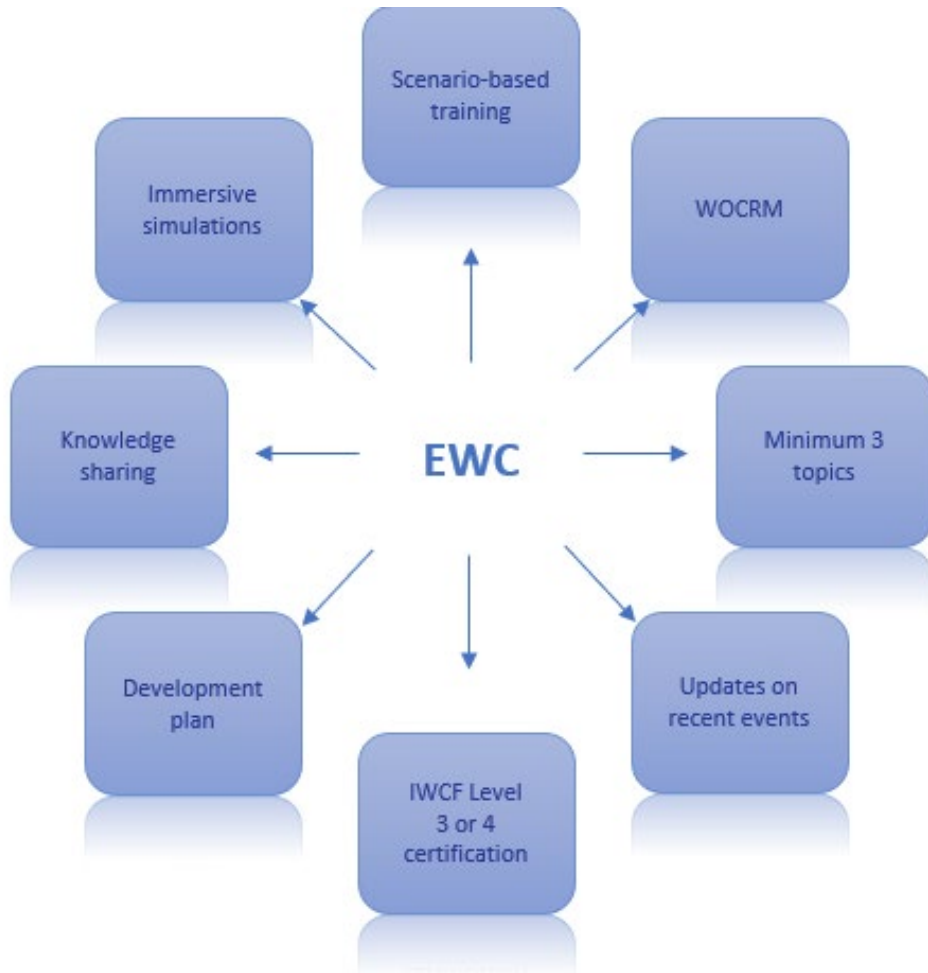
5 Training Providers

8 Countries



What does EWC look like

Course structure



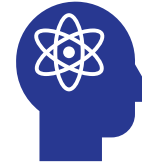
Enhanced Well Control Topics

1. Highly Deviated / Horizontal Well Control
2. Volumetric Method
3. Stripping into Wellbore
4. Lubricate and Bleed Method
5. Bullheading Method
6. Well Control Case Study
7. Wellbore Fingerprinting (Breathing vs Ballooning)
8. Reverse Circulation
9. Unusual Well Control Scenario
10. Advanced Well Control Equipment
11. Plug and Abandonment



What is EWC training

“Without knowledge action is useless and knowledge without action is futile” - Abu Bakr



An opportunity for candidates to apply their knowledge and skills through realistic and challenging simulated scenarios.

- Alternative to repeating the standard Level 3 or 4 course.
- Advanced training.
- Scenario based training.
- Integrates technical and non-technical skills together.
- Promotes teamwork.
- Realistic and challenging scenarios.
- Promotes learning in a safe and controlled environment.
- Opportunity to learn new concepts, explore different perspectives and acquire additional skills.
- Dynamic and transformative learning experience.
- Facilitates cross functional performance.



Who is EWC aimed at

Experienced drilling personnel

What does an experienced candidate look like:

- Have a solid understanding of core principles and concepts.
- Ready for more complex and specialised content.
- Possess a higher level of expertise.
- Candidates who have a growth mindset.
- Consistently perform well at Level 3 or 4.
- Demonstrate the ability to work autonomously and think critically.

Why is it important candidates who attend EWC are experienced:

- Building block for the development of more advanced skills.
- Can analyse and problem solve more effectively.
- Broader perspective.
- Ability to transfer and apply knowledge and skills to different contexts.



Why attend EWC training

Improve competency and contribute to safer and more efficient operations

Expand Knowledge	Build confidence and resilience	Reach a higher level of proficiency and expertise	Learn new skills faster (minimises the learner curve)	Receive constructive feedback
Deepen Understanding	Improve knowledge retention	Develop critical thinking skills and ability to problem solve in a high-pressure situation	Develop/refine skills and techniques	Apply knowledge and skills in a practical setting



Build a safe workforce

That:

- Make informed decisions
- Understand their environment, can anticipate issues and take preventative measures before they escalate
- Effectively communicate
- Respond appropriately to unexpected events and mitigate potential hazards effectively
- Apply knowledge effectively
- Equipped to handle the dynamic and high-stress nature of well control operations
- Demonstrate resilience
- Motivated and proactive



Our Vision

What we are aiming for

No risk to life, the natural environment or assets through well control incidents.



Well Operations Crew Resource Management (WOCRM)

Crew Resource Management (CRM) relates to “the cognitive, social and personal resource skills that complement technical skills and contribute to safe and efficient task performance”. Flin and O’Connor, 2008

Benefits

- Safety enhancements
- Error reduction
- Team coordination
- Decision-making under pressure
- Emphasis on communication techniques
- Raises awareness about Human factors that can affect performance.



How is EWC delivered

Scenario-based training

- Realistic scenarios.
- Interactive environment for experiential learning.
- Opportunity for analysis and reflection on performance.
- Assessment of individual and team performance.
- Increases learner engagement.
- Teamwork and communication.
- Active learning.
- Hands-on experience and practice.



Challenges and Opportunities

“In the middle of every difficulty lies opportunity” – Albert Einstein

CHALLENGES

Lack of awareness on WOCRM including benefits.

Uncertainty about what EWC is.

Disconnect between technical and non-technical .

Time constraints.

Inconsistent feedback/debrief sessions.

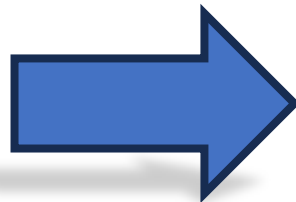
Simulator requirements.

Returning candidates.

Refresh standard well control knowledge.

Lack of open seats.

Accreditation only at Level 4.



OPPORTUNITIES

Improve awareness WOCRM.

Develop candidate pre-requisites.

Promote enhanced well control training.

Train instructors on WOCRM.

Create standalone delivery option.

More flexibility when to sit IWCF written assessment (EQP & PnP).

Standardise feedback/de-brief sessions.

Option to accredit smaller simulators.

Develop new topics.

Explore other ways to reinforce this knowledge – create alternative pathway.



Thank you



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