



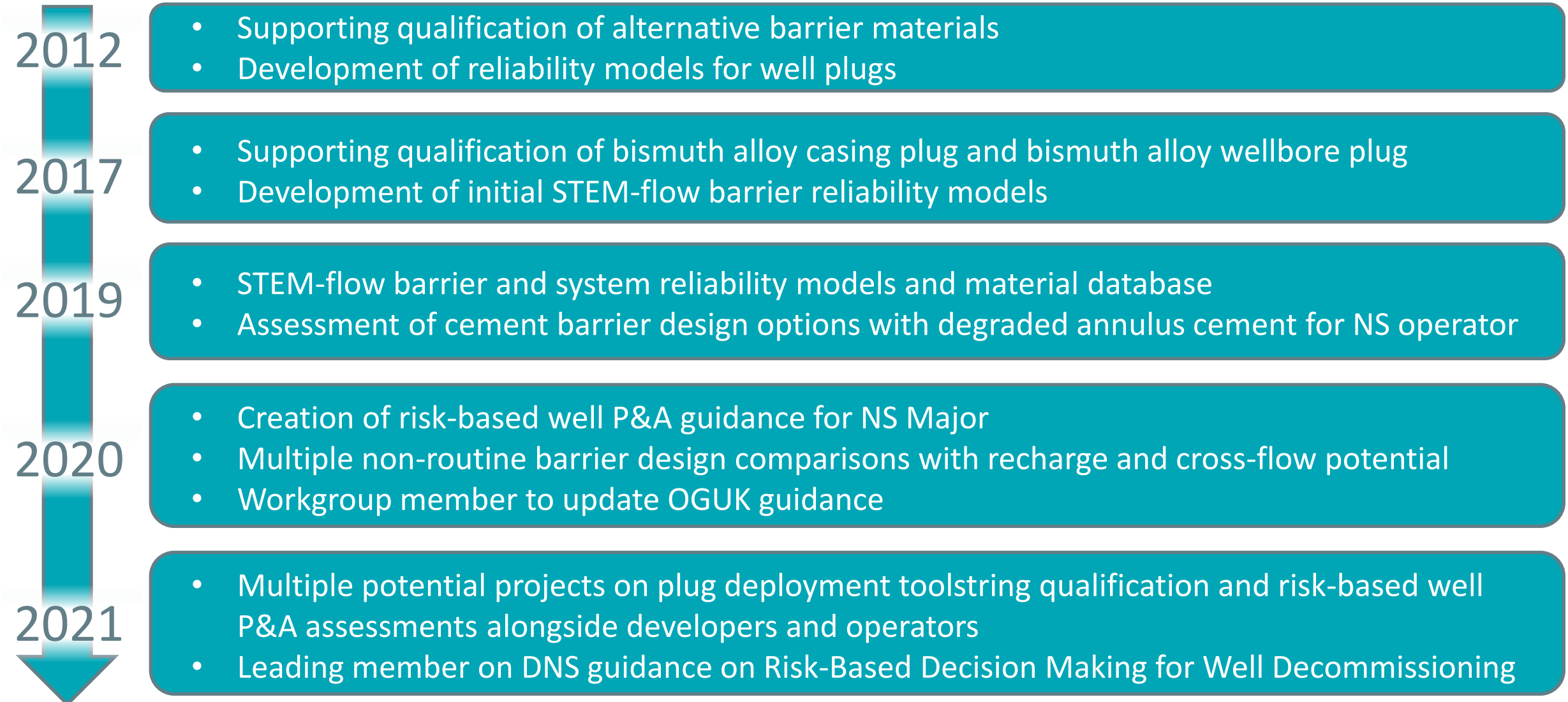
Astrimar

Risk-based Decision Making for Well P&A

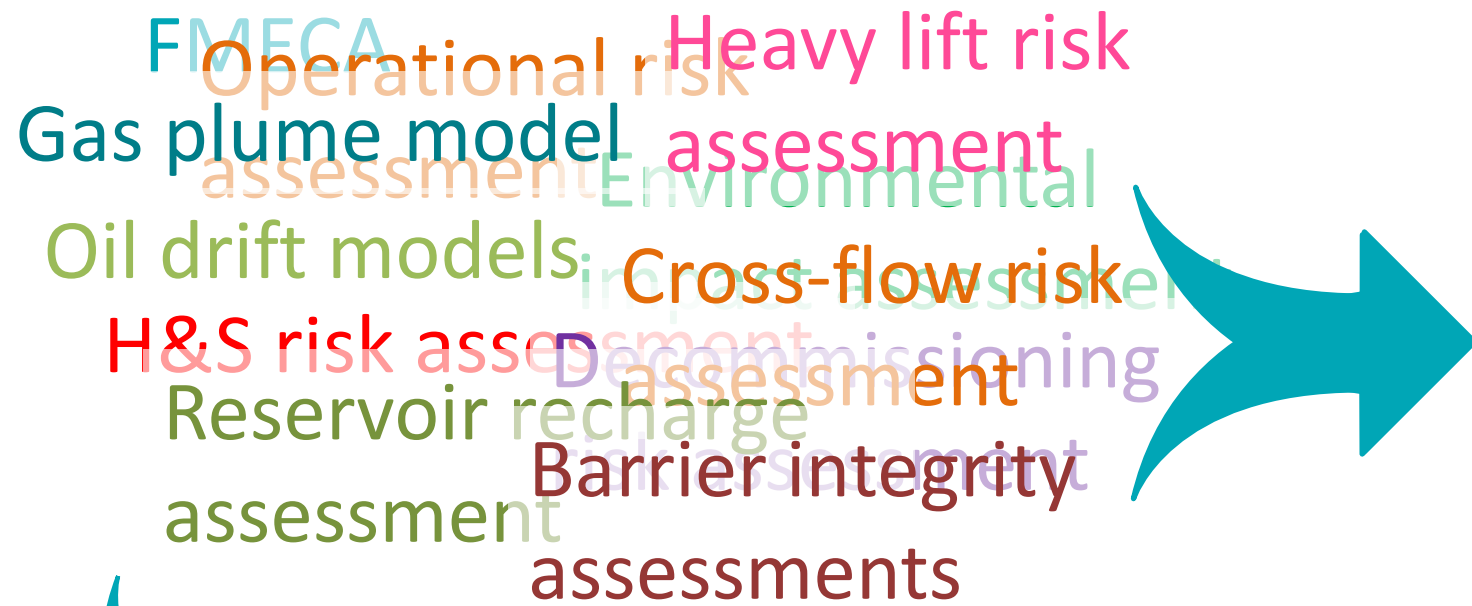
SPE Conference
11 May 2021

Brian Willis

Astrimar's experience at supporting better P&A



Risk-based decision making - What it is and isn't

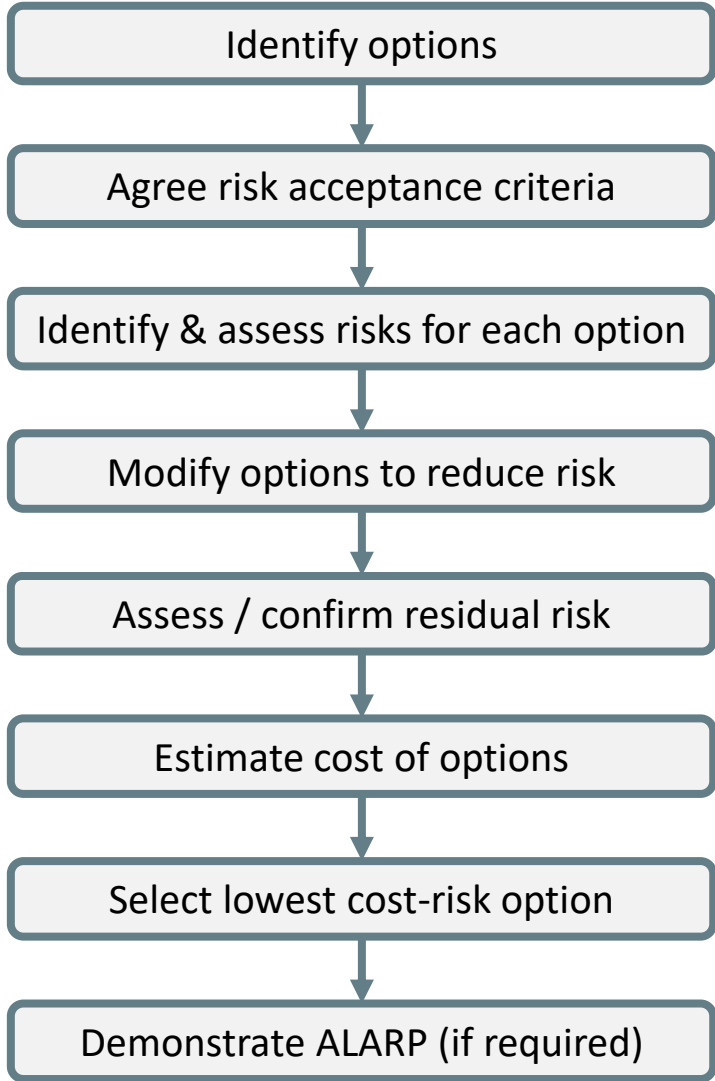


Purpose and consequences across assessments do not align or support decision making

Risk based well P&A

- Integrated decision-making framework
- Flexible approach
- Combines risk assessment methods
- Supports new technologies and processes

Well abandonment decision making process

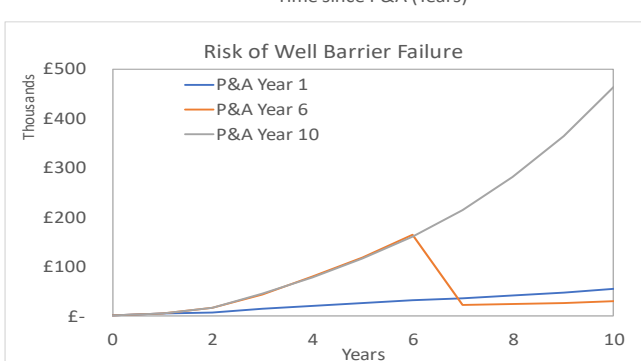
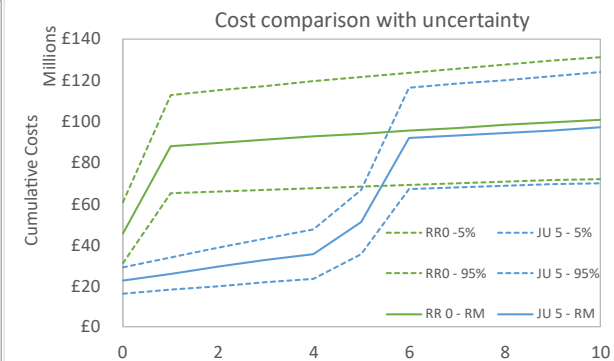
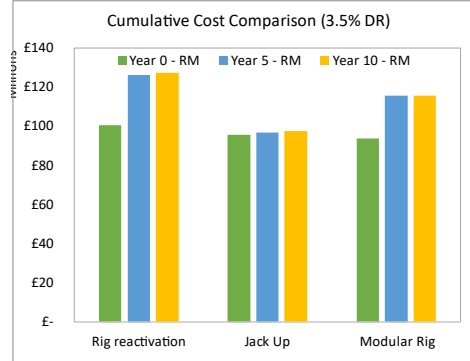
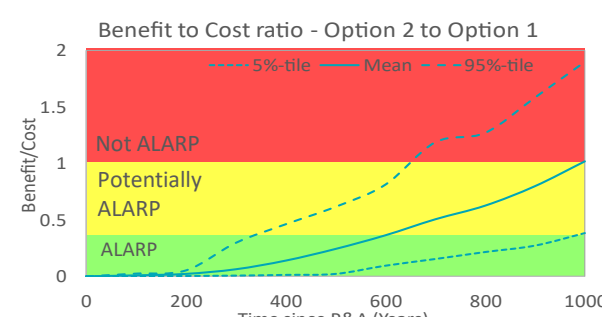
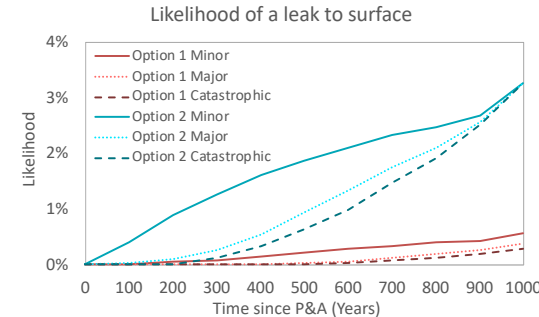
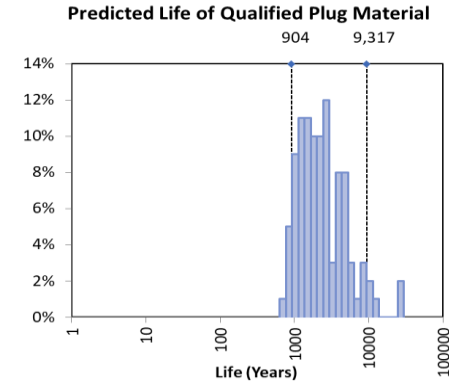
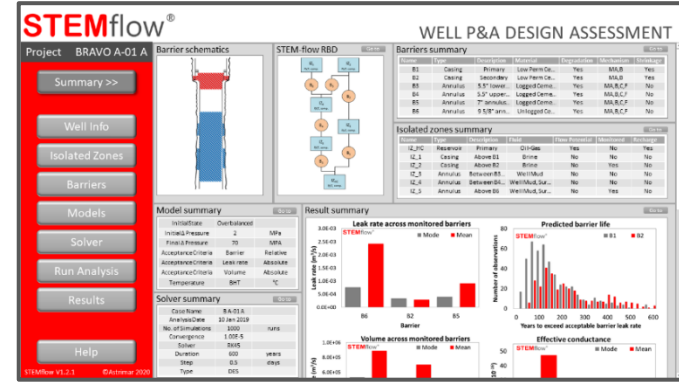


Alternative barrier materials
New deployment methods
Non-routine barrier designs

Barrier Q-FMECA
Installation Process FMECA
Well P&A Risk Assessment

Well P&A Event Tree
STEM-flow
Dynamic Fault Tree

Decision making, scheduling
Cost and time uncertainty



Outcomes and benefits of a risk-based approach



COST EFFECTIVE
WHILE MANAGING
ACCEPTABLE RISK



ENABLES ALTERNATE
DESIGNS AND
SOLUTIONS



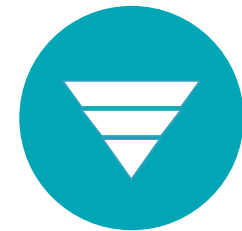
SUPPORTS RISK
MANAGEMENT OF NEW
MATERIALS AND
DEPLOYMENT METHODS



OPTIMISES USE OF DATA
TO PREDICT BARRIER
PERFORMANCE



UNDERSTANDS IMPACT
OF UNCERTAINTY OVER
TIME



RISK ASSESSMENTS TO
DEMONSTRATE ALARP



Astrimar

Thank you for listening

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