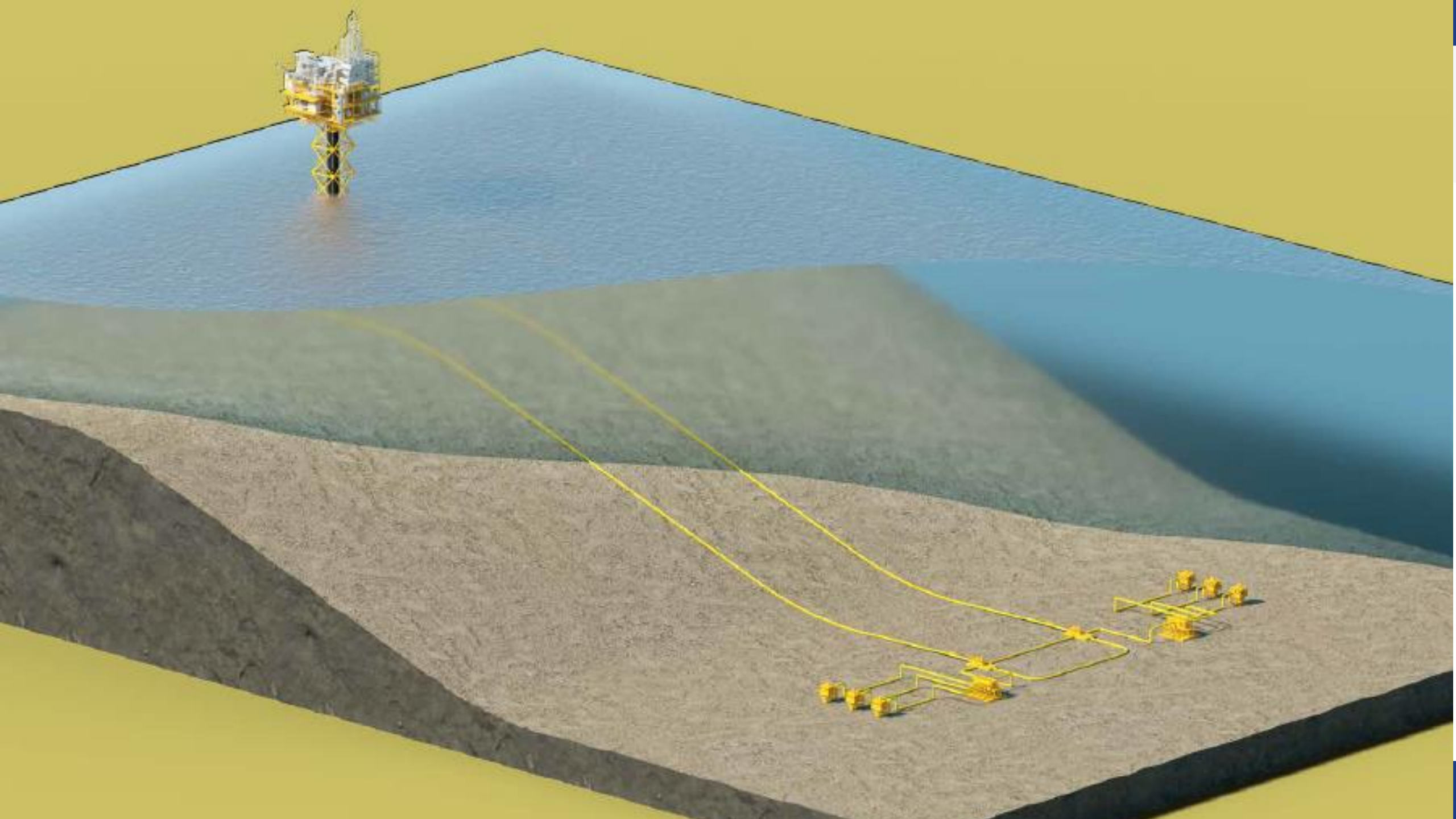
# Chemical inhibitor adjustments by subsea monitoring of corrosion rates

# Business case

- Location: Shah Deniz 2 - Caspian Sea
- 10 corrosion monitoring tools permanently installed subsea
- Monitor and optimize chemical inhibition program
- Tools positioned on weld and HAZ
- Data from tool is an important part of the corrosion management program



# Technical solution:

- Design temperature: -20 to 90°C (-4 to 194 °F)
- Design pressure exposed electronics: 300 bar (10000 feet)
- Design life: 30 years
- 144 transducers pr tool (configurable)
- Resolution: 2.5 µm
- Monitoring interval: 6 times per day
- Monitor carbon steel to carbon steel weld

# Conclusion

- Life extension for subsea pipelines
- Reduces need for intelligent pigging
- Real-time monitoring of the effectiveness of corrosion inhibitors (feedback within a few days)
- Monitor weld/HAZ to show variation in corrosion rates
- Non intrusive technique