

Hot ROCs ?

Fifteen years ago, the concept of remote operations centres (ROCs) for the oil and gas industry was seen as a cutting-edge innovation. First pioneered by the likes of BP and StatOil (as part of wider efforts focused on “digital oilfields”) the concept of the ROC is now well established in the industry. In fact, for newly built assets, ROCs are now the norm, rather than the exception.

We define *Remote Operations Centre* (or *ROC*) as a **purpose-built facility** where **multi-disciplinary teams** work together to **monitor, support or control** a company’s **production fields and/or assets**; with the ROC being **geographically distant** from those fields/assets.

In Australia, long distances and far-away assets are very much the norm. So it is no surprise that nearly all recent LNG builds have included a dedicated ops facility to support their distant assets.

In considering ROC developments in the oil & gas industry, globally and in Australia, we pose two questions: What lessons have we learned? What comes next?

Lessons learned ?

Our experience supporting clients with their ROC implementations has enabled us to identify **seven lessons learned** for the implementation of effective ROCs:

Leadership. ROC builds are complex multi-year evolutions that requires dedicated leadership, from the top.

Vision. Leading operators guide their build with both a long-term vision and very specific near-term objectives.

Credibility. ROC implementation and improvement teams include seasoned representatives from ops and technical disciplines.

Mix. Alongside the ops and technical people are a range of other specialists. ROC’s require multi-disciplinary teams when they are in build, and when they run.

Change. Change methods and tools are essential to the transition, and are more important than the technology. Leadership (at all levels) is the primary driver for acceptance and success.

Value. ROC projects start with sound business cases and conclude with detailed value audits.

Technology. The best organisations have a defined technology architecture for ROCs that is consistent across the enterprise yet scalable for each local deployment.

What next ?

As Australian LNG operations mature, operators need to improve and grow their ROCs. We see four focus areas for future development of Australian ROCs:

ROC on

Australian operators will expand their initial ROC scope (which was deliberately curtailed) so that they can extract greater value from their investment. For example, selective real-time process control will become widespread.

Sensor sensei

Operators will pipe more and more sensor data into their ROCs. Exploiting the superabundance of sensor data will become a primary function of the ROC.

People power

Australian ROCs will move from just planning, monitoring and controlling *assets* to planning, monitoring and controlling *people*. For example, planning and optimizing people movements during a shutdown will become a key function of the ROC.

Go beyond the boundary

Operators will integrate other organisations’ operations capability into their ROCs. For example, the operator will offer a permanent ROC seat to their maritime logistics service provider.

This is a summary version of the formal paper that appears in this year’s APPEA Journal. Please refer to the full journal article for a more detailed analysis. You are also very welcome to contact the author directly: Bradley Farrell, Oil & Gas Advisory Leader at EY, mobile +61 414 552 626, or email bradley.farrell@au.ey.com.

