

Keeping them working – the SPS challenge facing the Industry



The construction boom in the 1970s and 1980s means that there are more than 240 rigs still in operation and available that will need a major class renewal project in the next five years. Defining, planning and executing these projects will place a strain on resources, systems and capacity on shipyards around the world. Adding the rigs-built post 1990s, means that the scale of the challenge facing the industry is high and some Drilling Contractors face more challenges than others.

Over five years ago, we wrote an insights paper ([November 2014](#)) on one of the challenges the mobile offshore drilling sector was facing, the ageing of the assets due to the offshore rig construction boom in the late 1970s and early 1980s. When we wrote the paper there were still more than 300 of those rigs drilling only 57 had been retired, converted or cold stacked. What has happened in the last five years? Have more rigs been scrapped or cold stacked?

Defining, planning and executing special periodic survey (SPS) projects presents a set of challenges to the drilling contractors. If not well planned and executed, they can be very costly and susceptible to schedule overruns. Running multiple SPS projects may place a strain on resources. It requires specific expertise to define and plan the scope of work.

With more than half still operational a peak in major SPS and class renewal activity at 35 and 40 years is about to hit the industry. In the next five years there are 136 of those rigs due to go through this process, according to the publicly available data.

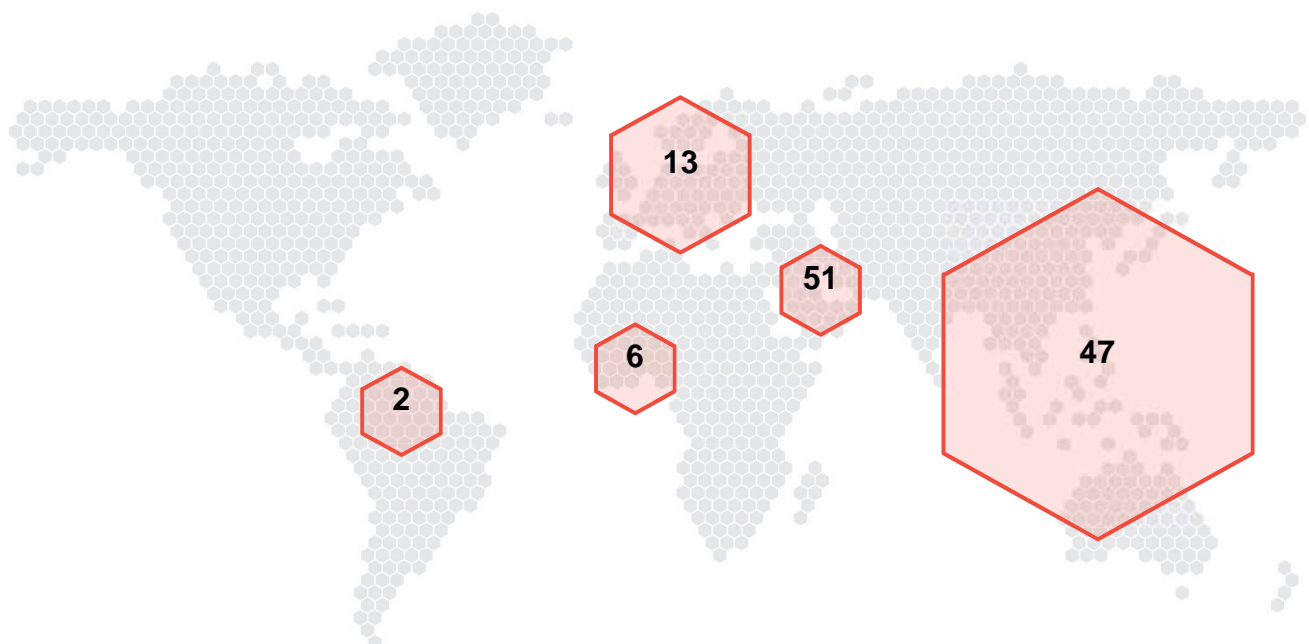
For many years these rigs have been the workhorses of the offshore global fleet. What’s the future for the remaining rigs from the 1970s and 1980s construction boom?

Where are they now?

Currently there are 119 mobile offshore drilling units (MODUs) that were constructed in the 1970s and 1980s still drilling globally. They are spread around the world. Their number has decreased (62% decrease) significantly since we published our last paper on ageing rigs in November 2014. The main factor was due to the oil slump—and the offshore drilling market hasn’t yet recovered. 71 older MODUs have been permanently retired.

The highest regional concentration of the old rigs currently drilling is the Middle East and they are all jackups.

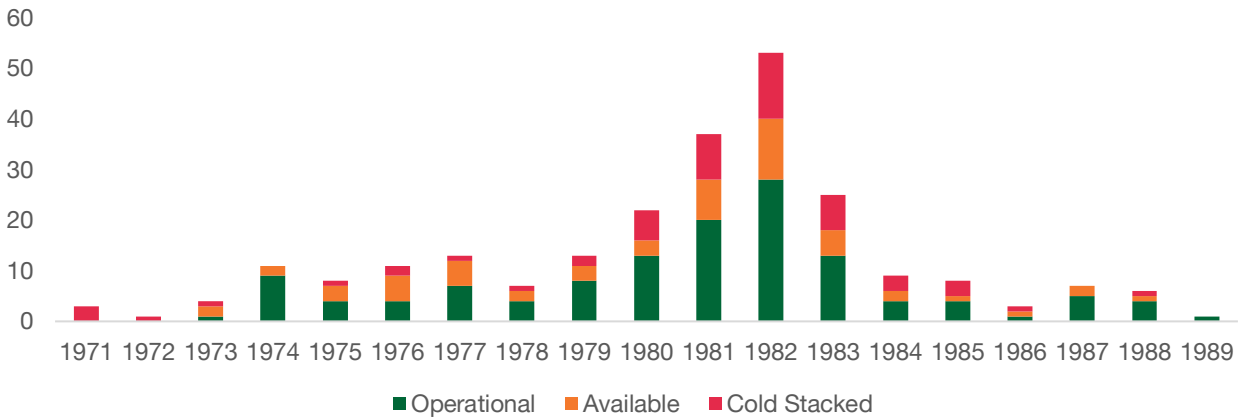
Figure 1: Current location of the 119 MODUs still drilling



Source: RigLogix data, Epeus analysis, snapshot of 04th December 2019

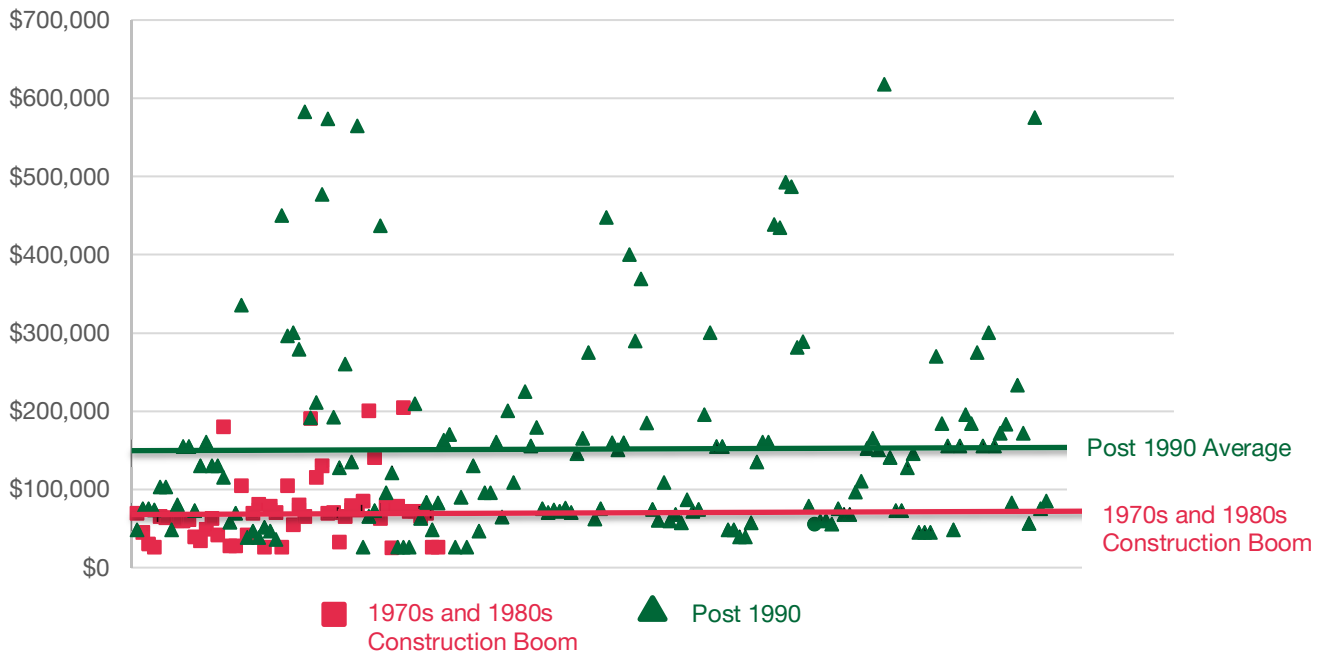
The overwhelming majority of the old rigs (constructed in the 1970s and 1980s) are either operating or available. There are around 242 older rigs and most of them are jackups (79%); followed by semisubmersibles (19%) and drillships (2%).

Figure 2: MODUs Status by Their Delivery Year
 Source: RigLogix data, Epeus analysis, snapshot of 04th December 2019



More than a half all the MODUs older than 30 years of age are still operational and are earning revenues for the organisations that own them (as portrayed in figure 2).

Figure 3: Spread of MODU Day Rates Based on Construction Period
 Source: RigLogix data, Epeus analysis, snapshot of 04th December 2019



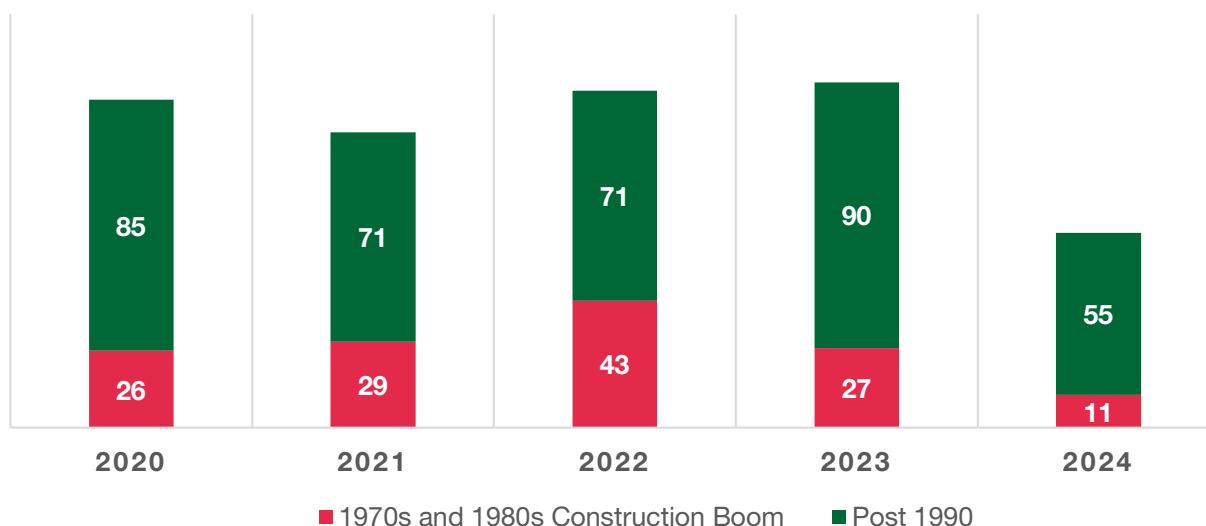
Taking the current industry day rates averages for jackups, semisubmersibles and drillships (built post 1990s); and comparing them to the rates of the rigs constructed in 1970s and 1980s which are still operational, shows that more recently constructed rigs earn higher day rates, as shown in figure 3 (bearing in mind that these figures are slightly skewed because there are more post 1990 semisubmersibles and drillships in operation than the semisubmersibles and drillships constructed in 1970s and 80s).

The Challenge Facing the Industry

As the previous sections have shown, most of the rigs from the 1970s and 1980s construction boom are still operational and in the next five years will go through their 35, 40, or 45-year SPS. The entire offshore rig fleet cycles through the five yearly SPS projects; and so, these rigs are just part of a bigger picture, as shown in figure 4 below.

Figure 4: All SPS Projects by SPS Year

Source: Riglogix data, Epeus analysis, snapshot of 04th december 2019



The downturn has reshaped the rig ownership. Some Drilling Contractors have gone through mergers & acquisitions (i.e. ENSCO and Rowan have formed Valaris) and others have ceased to exist, and their rig fleets are owned by other Drilling Contractors (i.e. Paragon's fleet is now owned by Borr Drilling). The ownership of these old rigs and the challenge to define, plan and execute the SPS activity is spread across the Drilling Contractors (as shown in table 1).

Table 1: Drilling Contractors with the Most Upcoming SPS projects (Rigs Built in 70s and 80s)

Source: RigLogix data, Epeus analysis, snapshot of 04th December 2019

	2020	2021	2022	2023	2024	Total
Shelf Drilling	4	4	7	10	1	26
Advanced Energy Systems	2	3	3	2	1	11
COSL	3	2	1	3	1	10
Valaris	1	2	5	-	1	9
ADNOC Drilling	2	2	2	-	1	7
ONGC (NOC)	1	1	4	1	-	7
Enterprise Offshore Drilling	-	-	2	3	1	6
Transocean	2	1	-	1	1	5
Aban Offshore	1	1	1	1	-	4
Diamond Offshore	-	-	2	1	1	4
Borr Drilling	-	2	1	-	1	4
ARO Drilling	-	2	1	1	-	4

It Isn't Just the Older Rigs

There are also around 214 rigs that were built post 1990 that will require an SPS in the next five years (shown in table 2). Almost 100 of them will be going through their first SPS project, as they were delivered in 2014 or after.

Table 2: Drilling Contractors with the Most Upcoming SPS projects (Rigs Built Post 1990)

Source: RigLogix data, Epeus analysis, snapshot of 04th December 2019

	2020	2021	2022	2023	2024	Total
Valaris	9	8	11	6	5	39
COSL	3	8	7	12	5	35
Transocean	11	9	2	1	4	27
Seadrill Ltd	4	3	1	13	3	24
Maersk Drilling	3	2	2	4	6	17
Noble Drilling	1	3	3	5	5	17
Borr Drilling	3	2	-	9	1	15
Shelf Drilling	-	1	5	-	4	10
ARO Drilling	2	1	2	4	-	9
ADNOC Drilling	2	1	4	-	-	7
Saipem	4	-	2	1	-	7
Gulf Drilling International	-	2	-	4	1	7

Table 3 below shows the Drilling Contractors with the most upcoming SPS projects in total in the next five years.

Table 3: Drilling Contractors with the Most Upcoming SPS projects

Source: RigLogix data, Epeus analysis, snapshot of 04th December 2019

	2020	2021	2022	2023	2024	Total
Valaris	10	10	16	6	6	48
COSL	6	10	8	15	6	45
Shelf Drilling	4	5	12	10	5	36
Transocean	13	10	2	2	5	32
Seadrill Ltd	4	3	1	13	3	24
Borr Drilling	3	4	1	9	2	19
Noble Drilling	1	4	4	5	5	19
Maersk Drilling	3	2	2	4	6	17
ADNOC Drilling	4	3	6	-	1	14
ARO Drilling	2	3	3	5	-	13
Advanced Energy Systems	2	3	3	2	1	11
Aban Offshore	1	1	7	1	1	11

Conclusion

The analysis in this paper shows that many of the rigs constructed in 1970s and 1980s are still operational. Now the industry faces the challenge of managing their continued compliance and classification renewal. However, there are a few things to consider:

- For the owners of the older rigs, the questions of whether to invest in life enhancement and continued renewal will once again be raised. Current market conditions mean that the decision on what to do with older assets becomes more prevalent.
- Shipyard capacity maybe be at a premium, in regions where infrastructure and facilities are not as developed or mature.
- Along with shipyard capacity the additional workload may place a strain on drilling contractors' resources and in the specific areas of expertise to define and plan the SPS projects. This risk has undoubtedly been amplified by companies downsizing due to the downturn.
- This type of project needs to be carefully defined, planned and executed to make the most of survey windows during operations and to minimize out of service periods during, or between contracts. We know from experience that the level of definition and plan activities needs to be high in the years prior to the SPS project being executed in order to prevent cost overruns.

The Epeus Group

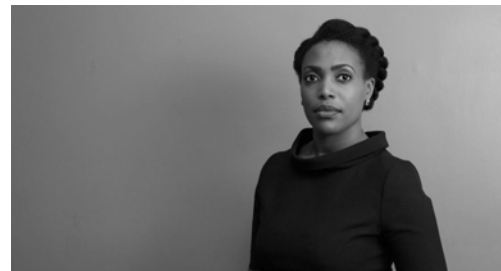
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