

Background

Offshore O&G platforms are operating beyond their design life and their assets are ageing. They often have a backlog of asset management tasks.

The asset management tasks need to be performed efficiently with restricted workforce size.

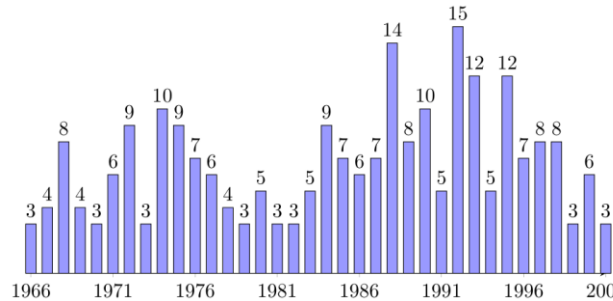
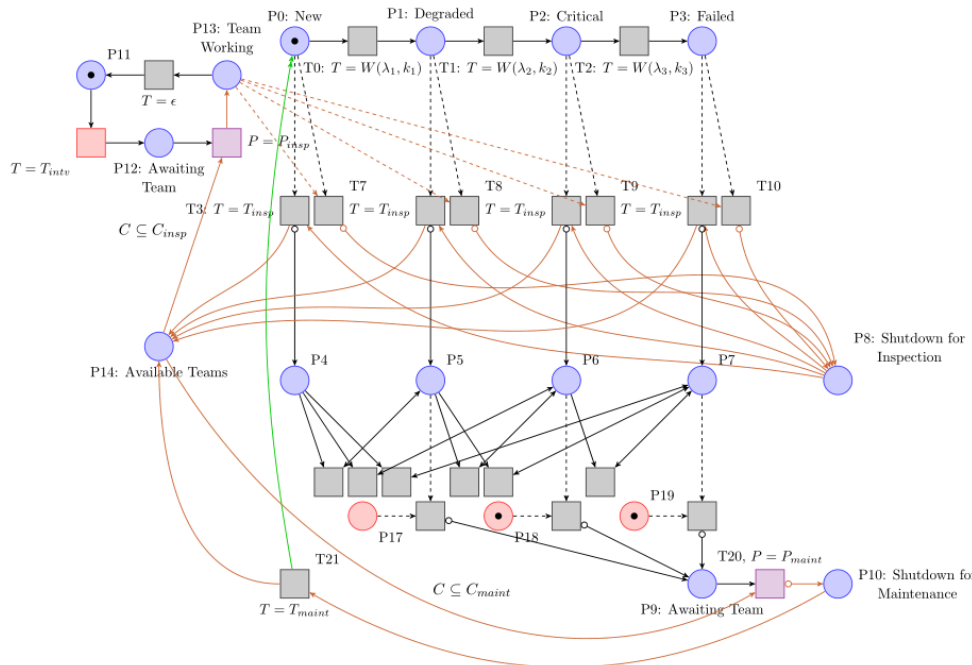
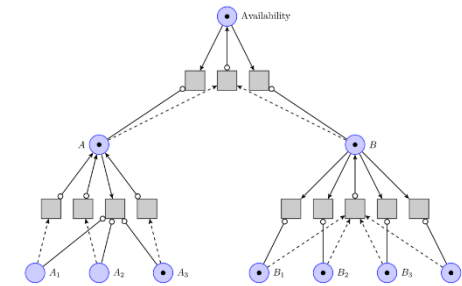


Figure 1: Ages of UKCS installations.



Objective

Use a Petri Net model to simulate offshore systems from installation to platform decommission following a life extension stage.

The model aims to maximise the system availability and minimise the costs through optimising the following:

- i. The priorities of asset management tasks.
- ii. The asset management strategy.
- iii. The number of asset management teams.