

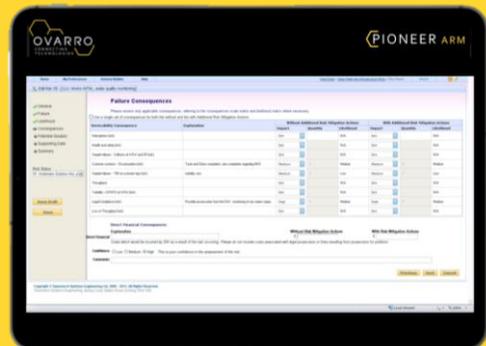
PIONEER Asset Risk Management (ARM) provides Operational and Asset Managers with means of potential solutions. PIONEER ARM is a software application within the PIONEER asset expenditure planning suite.

Through integration with PIONEER, ARM is able to provide a number of features not offered by stand-alone risk registers:

- Users can link ARM Risks and Solutions to assets within the company’s asset data hierarchy
- ARM Risks are quantified in terms of their likelihood and consequences, using the same service measure framework used in PIONEER
- PIONEER users can include ARM Solutions as options within a PIONEER optimisation, allowing service targets and cost constraints to be set and the most cost-effective or cost-beneficial Solutions identified
- The PIONEER optimiser can automatically assess the service benefits of any asset replacements or refurbishments within the Solution
- Where the Scheme Builder application is also available, users can include one or more ARM Solutions within a scheme if required

Within ARM, a **Risk** is defined as any issue or potential issue that may lead to an impact on service to customers or the environment or a cost to the company. Risks can be associated with inadequate capacity, equipment not fit for purpose, asset deterioration, inappropriate configuration, obsolescence, etc.

A **Solution** is any action taken to mitigate or avert a Risk, and can involve capital and/or operational expenditure. Any number of alternative Solutions can be considered for a given Risk, and a single Solution can mitigate more than one Risk.



RISKS ARE QUANTIFIED BY ENTERING:

- The likelihood of the Risk event occurring
- The probability that a service impact will occur, given the Risk event
- The severity of the resulting service impact (if required) – e.g. the duration of the supply interruption
- The quantity associated with the service impact (if required) – e.g. the number of customers affected

Solutions can be defined in terms of their impact on Risks (e.g. to reduce the likelihood of failure or mitigate service consequences) and/or their effect on the assets (e.g. replacement or refurbishment). PIONEER ARM includes management dashboard and reporting facilities to assist in tracking the status of Risks and the development and implementation of potential Solutions.