6.16.1 Create (Update) Asset Register

All the assets are identified and described in a functional tree according to a well-defined structure.

6.16.2 Assess / Update Assessment of Operational Units

Each operational unit is assessed after being identified in the asset register then reassessed on a regular basis. Details of how this assessment is to be conducted are given in a specific work instruction. In conducting such assessment the following objectives will be pursued:

- Assessment shall help relate the urgency of replacement with technical and economic criteria like the condition of the asset, its performance and its criticality to the global plant therefore assisting Contractor in establishing a schedule and a priority in the replacement needs.
- Homogeneity and consistency in the assessment, through a well-defined assessment criteria and a limited number of assessors.
- Time spent / benefits approach: assessment may be more detailed or updated more frequently for assets that are:
 - Of greater economic value
 - More critical to the pumping stations/operational units
 - Closer to the end of their economic or technical life

6.16.3 Define / Update Estimated Replacement Year and Cost

The above assessment will assist the Contractor maintenance team define (or update) for each operational unit:

- An estimated year of replacement
- An estimated cost of replacement

A time spent vs. benefits approach will be used when establishing these values. Year of replacement or cost of replacement will only be updated for those assets:

- Whose technical assessment as changed, therefore implying a potential significant change in these values,
- Or who are due to be replaced in the next 2 years.
- For other assets, the previous year replacement value will simply be updated by a general factor reflecting inflation.

The proposed year of replacement may also take into account other factors like the consistency with upgrade or extension works planned by the DMAT. Some non-specifically identified assets of low individual value need to be replaced on a regular basis. Examples of this are manual valves, railings.

To manage the replacement of these assets Contractor will define, in the Asset Management Plan, a yearly estimate not identifying the precise assets to be replaced (as they are not individualized in the asset register and it would be disproportionate to do so). Then this program will be developed during the year on an emergency (failed assets) and systematic (number of items to be replaced) basis.

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