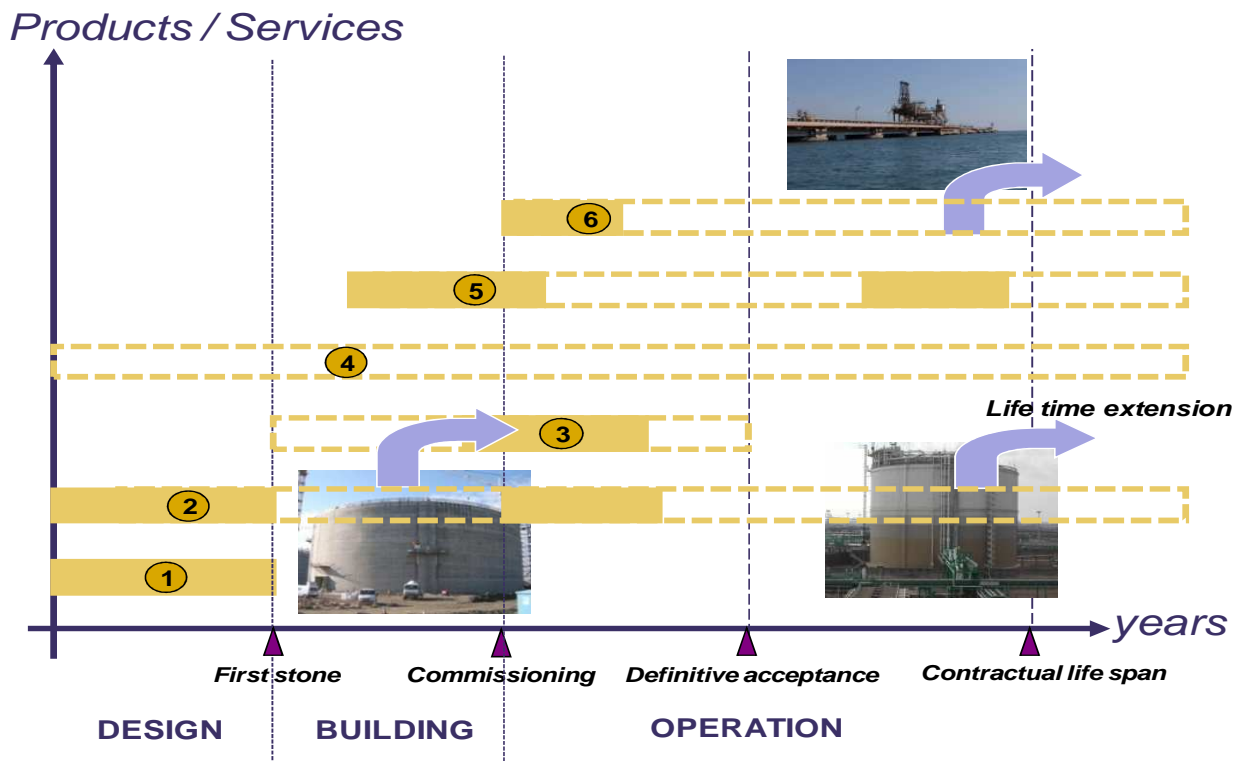




GLOBAL APPROACH TO ANTICIPATE AND MANAGE THE LIFE CYCLE OF LNG INFRASTRUCTURE



1 Sustainable and lifecycle-oriented design

- Long term performance objectives (ROI)
- Consultancy to owner / operator (technical objectives, design assumptions, risk level, building and control procedures...)

Guarantee LT performance

2 Monitoring, surveillance and inspections

- Ageing Monitoring™ system
- Risk-based surveillance / inspections

Reduce costs & Anticipate failure and replacement decisions

3 Impact of 'as built' gaps

- Risk-based impact analysis (short term and long term)
- Neutral and independent expertise of defects / disorders

Minimize unavailabilities & Preserve owner LT interest

4 Knowledge Management

- LNG tank 'as built' mapping
- Capitalization of lifecycle-related data (construction data, operation history, incidents, decisions...)

Record data, information and decisions

5 Control and check of repair sustainability

- Technical choices for durability (repair solutions, materials...)
- Execution methods and control procedures

Reduce maintenance costs

6 Ageing Management

- Operation risk management
- Diagnosis / prognosis of ageing
- Maintenance / refurbishment plans
- Life time extension / decommissioning

Optimize and prioritize maintenance actions

Postpone end of life