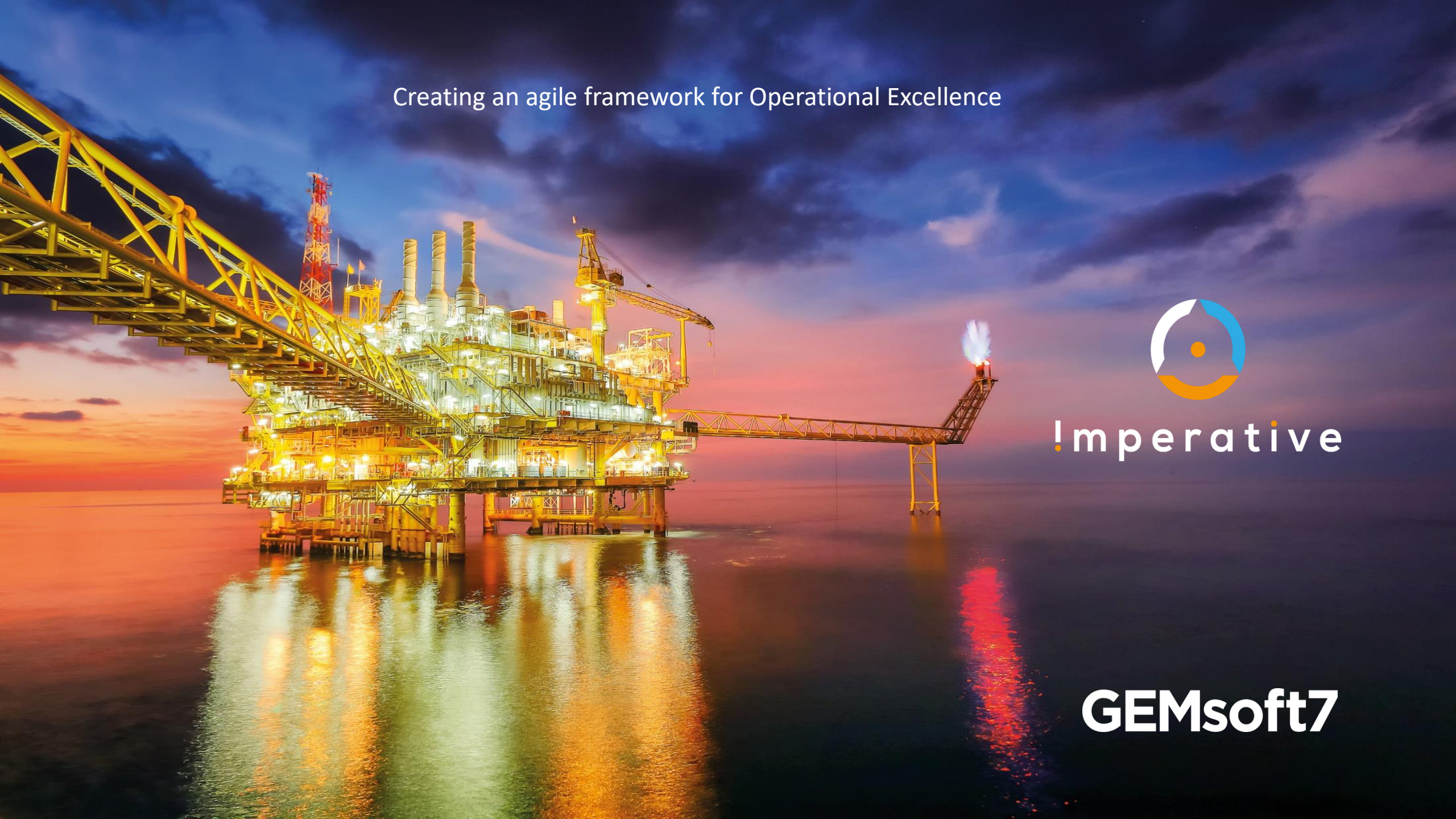

Creating an agile framework for Operational Excellence
Imperative
GEMsoft7

Welcome to the Imperative Workshop

- Creating an Agile Framework for Operational Excellence
  - The OMS need to be Agile, Proactive & Reactive
- Reframing what OE means in context of different industry sector requirements
- Unique Step-by-Step process
- Aim is to enable you to “Take Control” – not to be “Controlled” by the process
- Our workshop will
  - Help you understand how to meet minimum Safety and Regulatory protocols
  - Plan & Priorities Risk Management & Opportunity Development
  - Identify the Business Critical Factors where added value can be achieved
- Hands-on Session – will deliver your OE Agenda
- Full Lifecycle & Utilisation of Technology
- Intro to GEMsoft7
- First we would like to share a Safety Moment with you…..

GEMsoft7

- GEMsoft7 is devoted to workplace safety and has built a global reputation over the past 15 years, deploying P2W, our safe system of work software, across a diverse range of industries, from Airports to Oil Rigs, Mines to Pharmaceutical Manufacturing Plants, Nuclear Power Stations to Whisky Distilleries. The list goes on!

GEMsoft7

- Times are changing rapidly and GEMsoft7 is changing with them, responding to the challenges our clients and the wider industry are experiencing achieving the holy grail of Operational Excellence.

- We have responded to this challenge by first recognising that achieving Operational Excellence is an not an end point, but an aspiration! Just when you think you are getting close, reality shows there's always a distance yet to travel. This is why, most OE implementations fail! This has shaped Imperative – our response to how can we best help our clients.

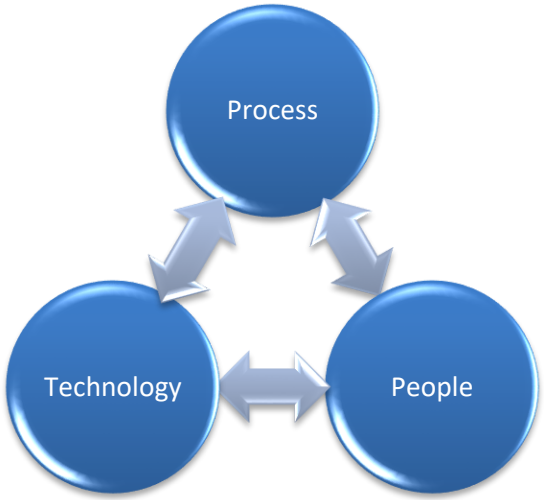
- Imperative from GEMsoft7 is reframing Operational Excellence, in the context of different Industry applications. Our unique, step-by-step process, led by Industry Subject Matter Experts, is designed not to control the way you work but ***to help you take control of the work you do, more effectively, efficiently and profitably!***

The Problem Statement!!!
OR
"Opportunity for positive change"

- Which do you prefer?
- Why do aspects of OE not work?
- What does OE mean to senior leaders?
- Digital Solutions
  - Solution" is a big claim, when no process is provided. Digital "Aid" may be more appropriate!
- Weaknesses (of current approaches)
  - Lack of SME input leading to focus on wrong issues
  - Rationalisation of the information? **(What does this mean?)**
  - Solutions do not address the business strategy – result: Improvements to Operations made in ignorance of the business strategy
  - Lack of process mapping produces Functional silos = sub-optimisation for the Organisation
  - Business Management Systems (e.g. OMS, HSEMS, etc): often are merely document repositories with no framework to establish order and functional alignment.
  - Multiple Risk Matrices used across functions and disciplines = inconsistent evaluation of Risk.

Digital Transformation

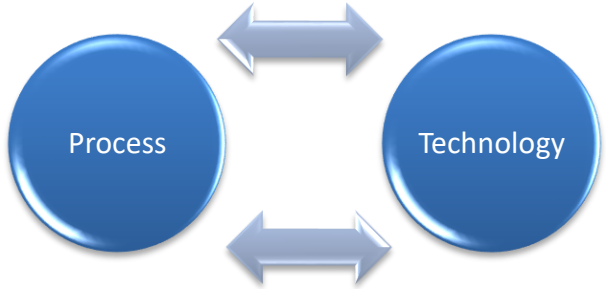
Current State



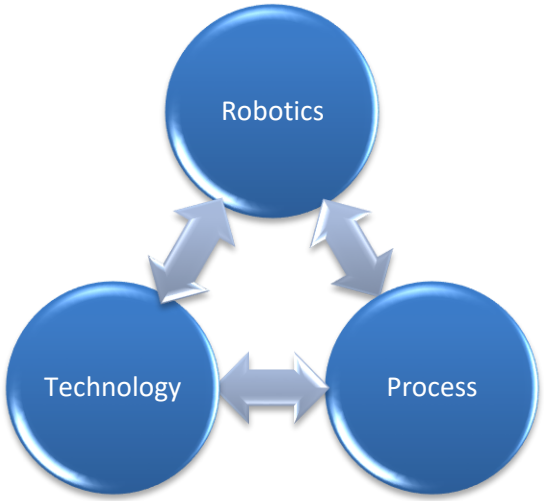
Digital Transformation

- Robots – RPA
- Machine Learning
- Automated Decision Making
- Predictive
- IIoT

Future (Goal) State



Where have the people gone?



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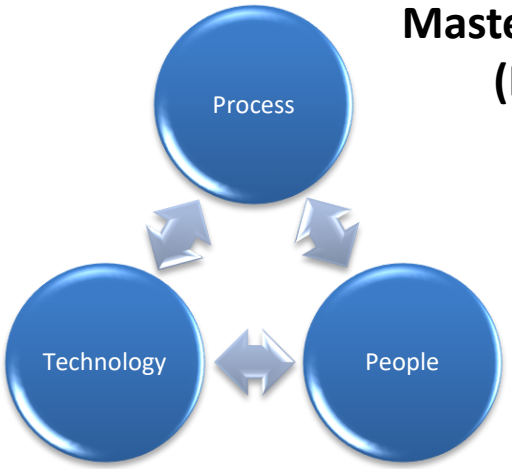
Current State

Master the Basics
(Level 3)



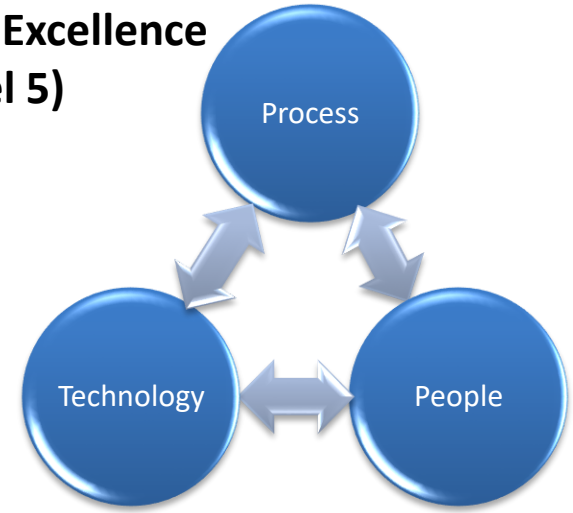
Understand

Digital Evolution

Imperative Assurance Model

Future (Goal) State

Operational Excellence
(Level 5)



- Nature Evolves
- Nature does NOT Transform
- People (SME) are key
- Technology SUPPORTS - not DICTATES

What if we could?….. Imperative

- What sets us apart?
- Operational SME input:
  - Imperative designed with 65 years combined Operations experience along side well developed software platform.
  - Listening to what industry has told us it wants.
- Imperative's LTO Process Suite
  - 21 processes that define the Operate space, developed from Imperative's OMS.
  - Driver for LTO process suite - remove Silos
  - Each LTO Process contains a process map detailing the links between all Business Functions and Operations to achieve the objective of the LTO process.
  - The Imperative OMS provides the internal control framework required to address the Silo nature of many current current Business Management Systems (BMS)
  - LTO Processes – can be developed to suit all businesses
- Barriers
  - that represent the Business as well as Process Safety
  - Production must be considered and risk ranked alongside other barrier health monitoring.
  - Business has to be profitable or it is NOT sustainable…..real ALARP principles applied.
  - Barriers built on SECEs
  - Live and Active Barriers – link to live systems
  - Predictive element – emerging conditions

What is OE versus Imperative?

- Imperative is an Evolution and Expansion of existing OE *Not a new initiative*
- Provides a clear definition of the minimum expectation as well as a systematic approach to drive progress toward 'excellence'
- It will integrate and reflect the requirements from many existing processes, tools and systems including:
  - Operations Management System (OMS);
  - Existing OE Processes
  - Many other functional processes/tools/standards
- The output of conventional assessments usually populate an action tracker that is ranked against the score or subjective view of perceived order of importance. This IS NOT efficient risk ranking nor management and is an incomplete process.
- The output from Imperative's Insight Assessment of all LTO processes is the LTO Maturity Profile, and set of unmitigated risks / actions.
- Unmitigated -> Mitigated: using the single (i.e. unified) Imperative Risk Management process mitigated risk views (LTO Barrier View) (Operational Business Barrier?) are produced.

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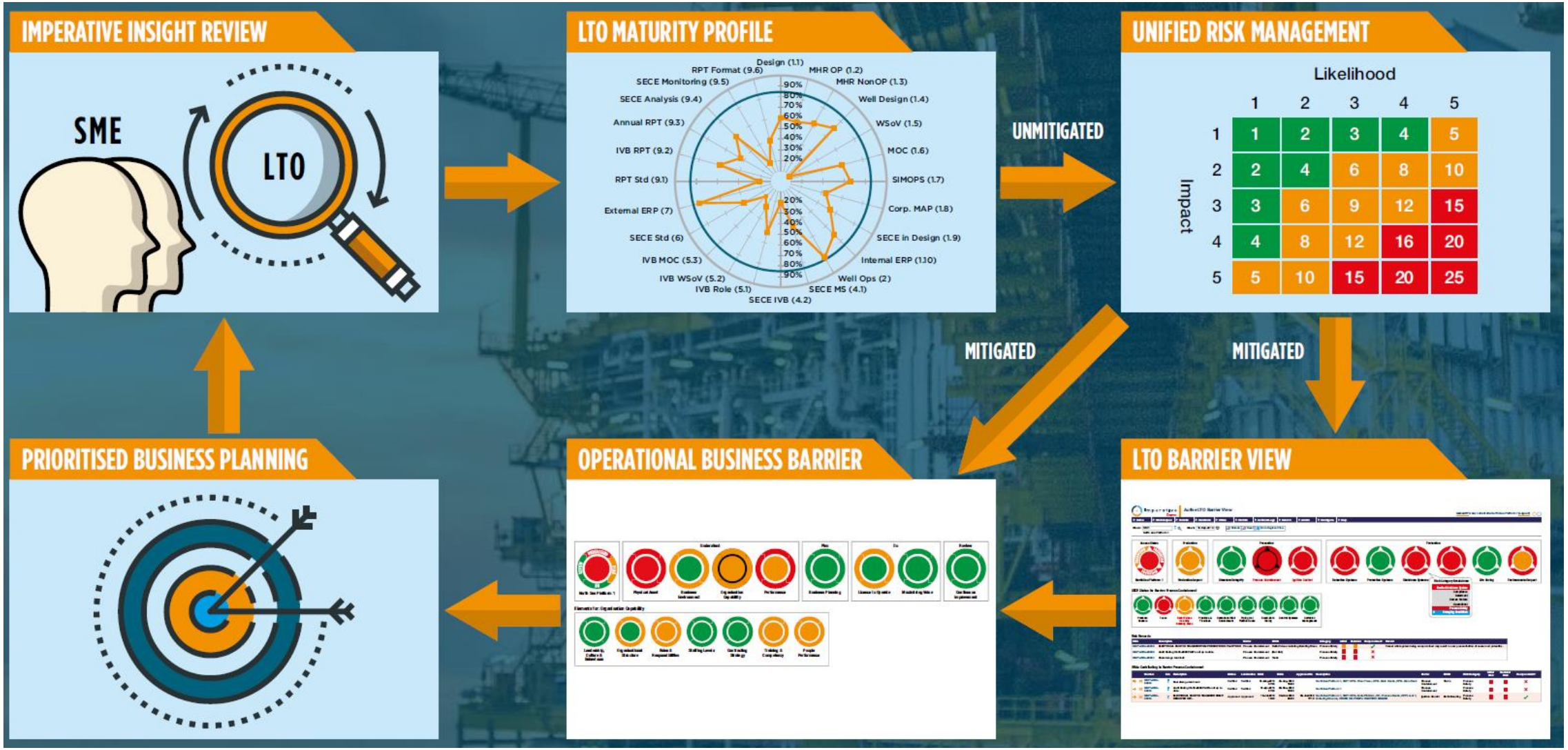
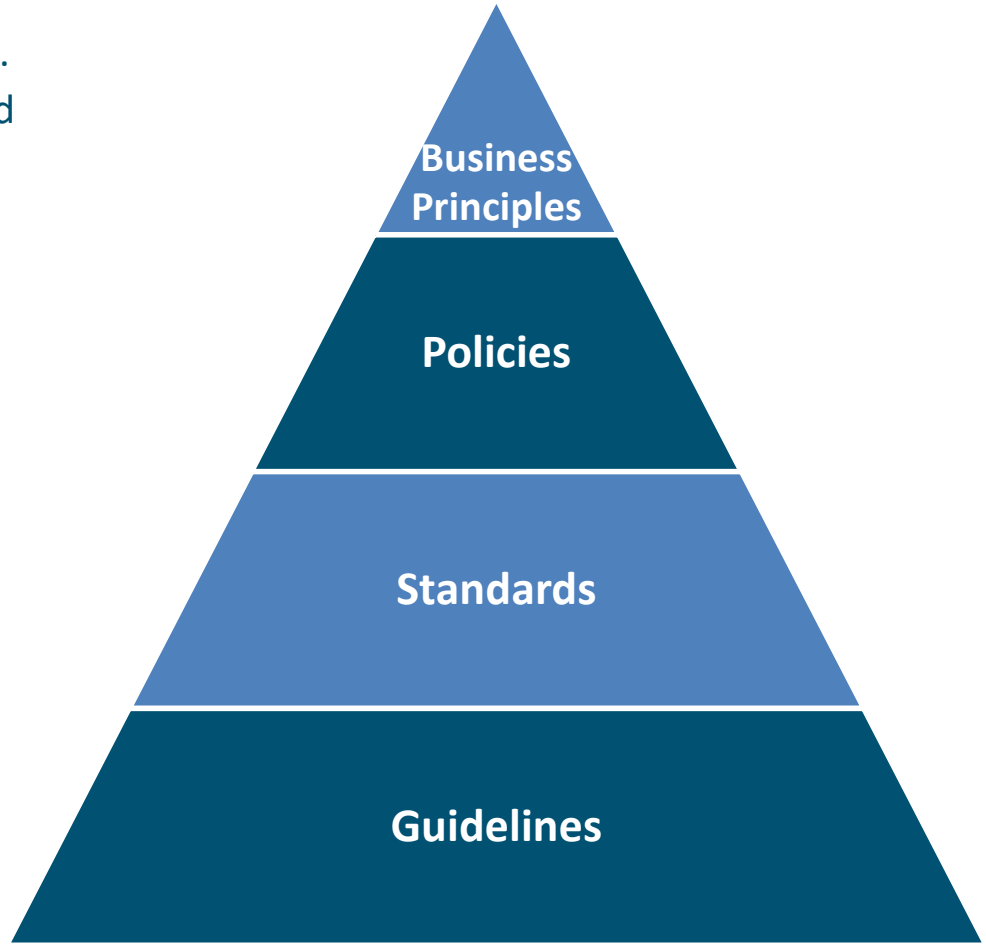

IMPERATIVE INSIGHT REVIEW
SME
LTO
LTO MATURITY PROFILE
Design (1.1)
MHR OP (1.2)
MHR NonOP (1.3)
Well Design (1.4)
WSoV (1.5)
MOC (1.6)
SIMOPS (1.7)
Corp. MAP (1.8)
SECE in Design (1.9)
Internal ERP (1.10)
Well Ops (2)
SECE MS (4.1)
SECE IVB (4.2)
IVB Role (5.1)
IVB WSoV (5.2)
IVB MOC (5.3)
SECE Std (6)
External ERP (7)
RPT Std (9.1)
IVB RPT (9.2)
Annual RPT (9.3)
SECE Analysis (9.4)
SECE Monitoring (9.5)
RPT Format (9.6)
UNMITIGATED
UNIFIED RISK MANAGEMENT
Likelihood
Impact
MITIGATED
MITIGATED
PRIORITISED BUSINESS PLANNING
OPERATIONAL BUSINESS BARRIER
LTO BARRIER VIEW

Internal Control Framework (ICF)

- **Purpose**: Defines the way in which a company controls its activities.
- **Contents**: comprises the Business Principles, Policies, Standards and Guidelines for a company.
  - establishes a clear structure and hierarchy of mandatory policies and standards, and non-mandatory guidelines, for company-wide application to enable compliance with the company's Business Principles;
- **Risk Management**: facilitates the Company's identification, management and execution of business, operational, financial and compliance risks
- **Assurance**: of the quality of internal and external reporting; and
- **Legal / Regulatory**: provides standards that are consistent with applicable laws and regulations in countries where they operate.



Imperative ICF linking to OMS : What it Comprises

- ***Company Business Principles*** set out the Company's core standards of ethical conduct. They also define the Company's responsibilities to its people, to society and to the environment. We believe that no company can achieve lasting success without ethical integrity, responsible environmental stewardship and development of positive and enduring relationships with the people, communities and organisations affected by its activities. The Company Business Principles are mandatory and are underpinned by policies and standards.
- ***Policies*** are high-level statements that flow from and define how the Company operates in accordance with the Business Principles. Policies are mandatory for all Company employees and (unless otherwise stated) all contracted employees. The policies cover Ethical Conduct, Governance and Stewardship, HSSE, Human Resources, Human Rights, Information Management and Security, Social Performance and Speak Up (Duty to Report).
- ***Standards*** define how key safety, operational, functional, assurance and compliance tasks and activities are carried out and in certain cases cascade directly from the policies. They detail what must be done to achieve the required performance level for key tasks and activities. Standards are mandatory for all Company employees and (unless otherwise stated) all contracted employees.
- ***Guidelines*** provide best practice implementation advice for the Business Principles, policies and standards. These are not mandatory but their adoption is expected.

Imperative OMS: Objective and Scope

The objective of the OMS is to define the mandatory framework for the management of the operation of Operated Assets

The Standard is focused to ensure the optimum performance of Production Operations within a Company and to define the standards to meet the criteria of the Frontline Operations Requirements and deliverables by:

- Demonstration of care for the team members and management of their safety;
- Ensuring people only do work they are trained and competent to do;
- Clearly communicating expectations, setting priorities and checking they have been
- delivered;
- Always ensuring team members follow the rules;
- Working to a plan and making timely decisions and appropriate interventions;
- Managing the performance of the team;
- Driving for continuous improvement with no short-cuts;
- To optimise production safely and only spend what is necessary.

Imperative OMS: Example Categories

. The Operations categories covered by the Imperative OMS include:

- Planning & Resourcing
- Operations Assurance & Readiness in Projects
- Safe Systems of Work
- Production Management
- Maintenance Management
- Operations Integrity Management
- Logistics Management
- Knowledge Management
- Assurance
- Well Integrity Management

LTO Framework

UNDERSTAND → **PLAN** → **DO** → **REVIEW**

Information and data relating to the process and its related interfaces are assembled and understood. This covers the overall framing for the activity being undertaken with attention to resources, risks and constraints

Based upon the 'understand' stage the activity is planned. Detailed work plans and deliverables are developed and resources identified

Work is executed to complete the defined deliverables

A review and feedback cycle into the Understand stage. This stage includes an assessment of the opportunities and risks together with how these can be realised or mitigated as appropriate

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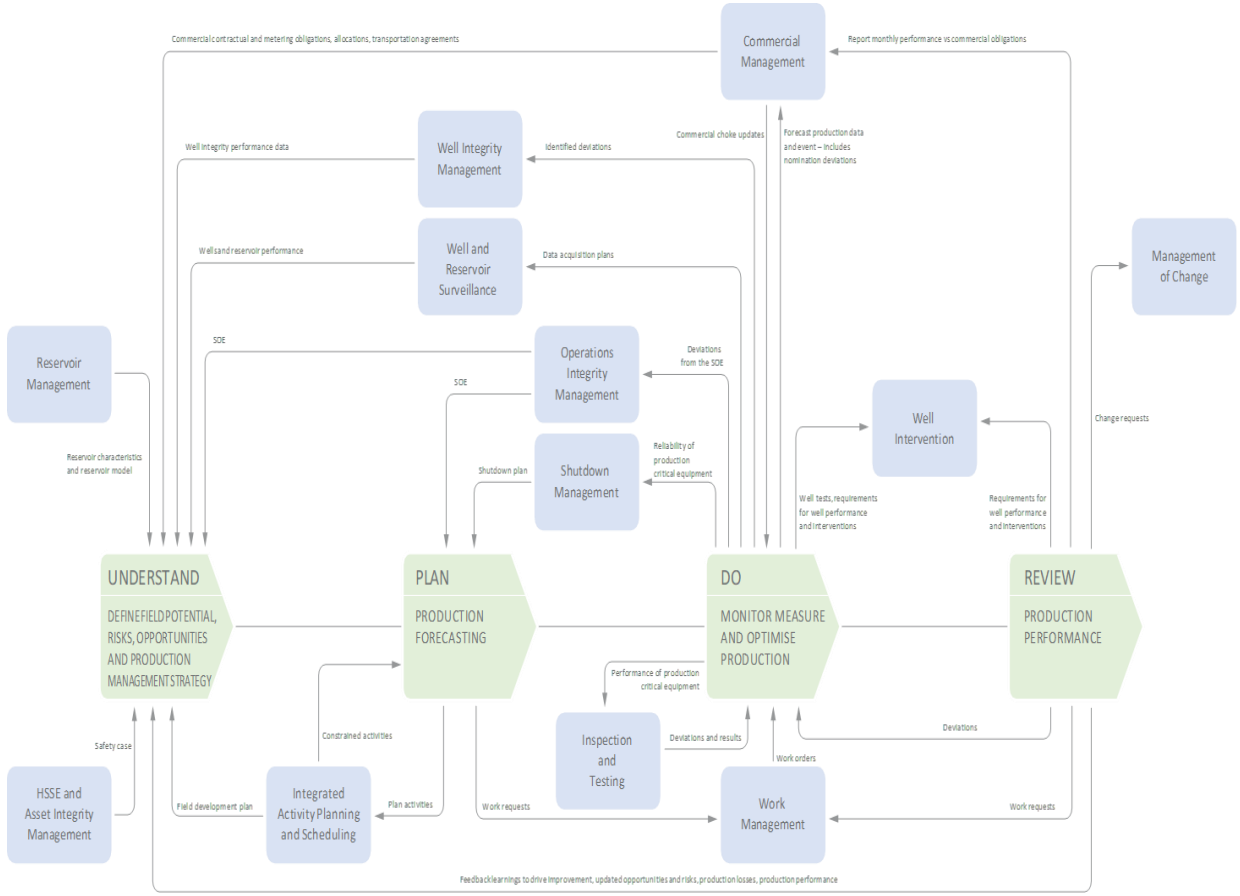
Example LTO Process – Production Management

- A Production Risk is defined as an event that will prevent an Asset from producing its LMPP or one of its chokes MPP.
- A Production Opportunity is defined as a project/activity that, if acted upon and delivered, will increase either the MPP of any choke and potentially the LMPP of the field or support Assets in delivering the MPPs of their production system chokes (protect base production).
- The Imperative guideline provides a structured approach to delivering or increasing the LMPP of an Asset. The high level Imperative Insight process is referenced against a common workflow as shown:
- Understand – Identify Production Risks and Opportunities
- Plan –The mitigation of Production Risks. Prioritise and plan the delivery of the Production Opportunities
- Do – Close-out all the actions needed to mitigate the Production Risks. Deliver the planned Production Opportunities.
- Review – Review the impact of the delivery of Production Risks and Production Opportunities on Asset Production Performance.



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Imperative: measuring Operational Maturity

An assessment framework that lays out a company's minimum expectations and is used as the basis for asset led business improvement. It represents a collective, not subjective, view of *'what good looks like'*

Imperative measures "Operational Maturity" via these levels

Performance Level	Description
Level 1 – Non compliance	Risk against Licence To Operate and reputational risk for the company
Level 2 - Firefighting	Meeting local legislation only, very relative ways of working, supported by basic systems and processes
Level 3 – Delivering the basics	Meeting the minimum standard 'shall statements' as laid out in an OMS Core company tools and processes in use and are acceptable to support business operations
Level 4 – Progressive	Best practice, as laid out in the company procedures, are widely employed, with the ability to anticipate issues before they occur. Able to sustain and exploit new opportunities
Level 5 – Achieving excellence	Demonstrating continuous improvement, learning and applying new methods and techniques. Systems and processes are class leading

Where one or more of the key LTO Processes are below 'Level 3' asset leadership are expected to formulate an improvement plan to close the gap

Imperative: LTO Processes

The Imperative Assurance Model is structured as a suite of distinct LTO Processes which describe the Operate phase of assets. Each process shares the following template:

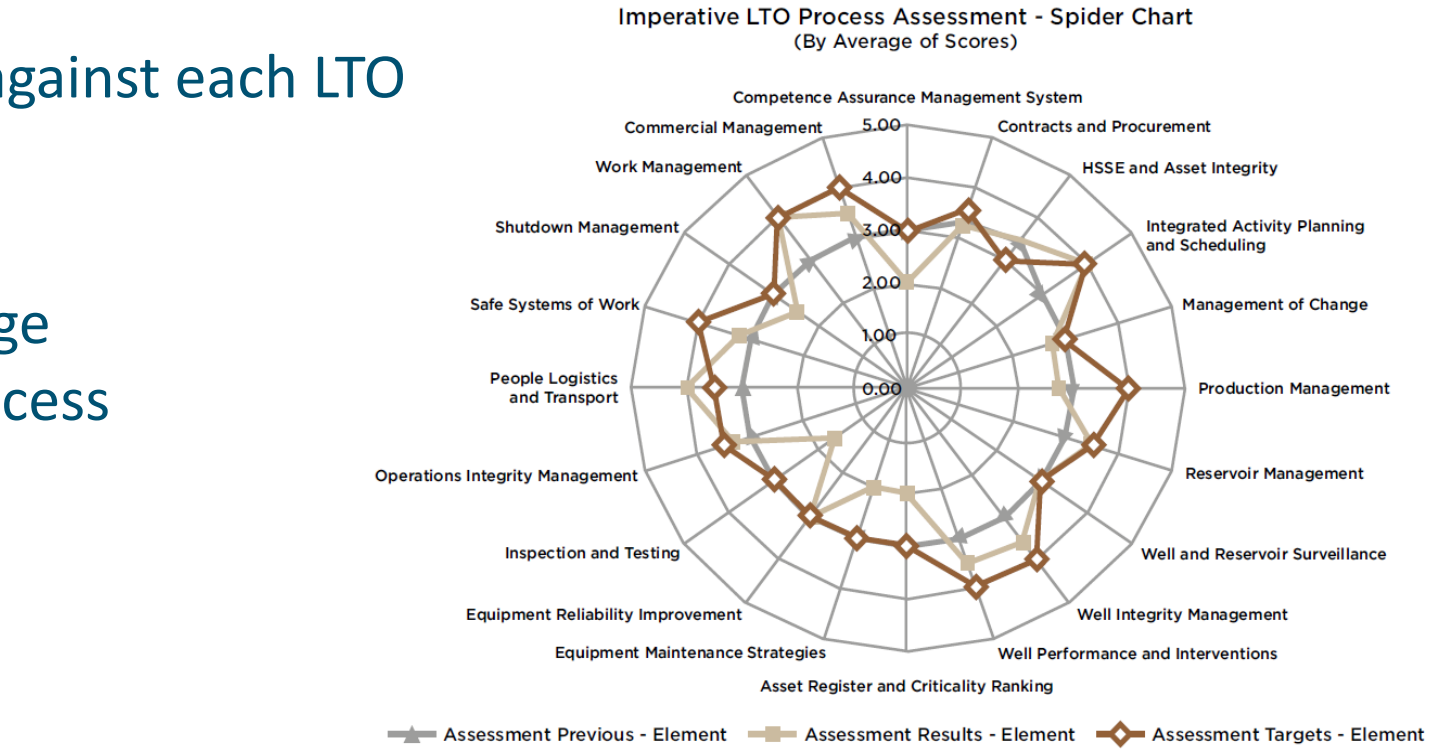
	Description
High level statement	A summary of the scope of the element, its context and purpose
KPIs and Measures	The key performance indicators used to measure success in the element and other measures that would be useful to monitor when trying to improve the process
Standards and Procedures	The Standards and Procedures that already exist for the process and which you can therefore refer to for more information about how to improve
Process	The major process steps for the element, depicted as a process map
Performance Criteria	What good and bad looks like for each of the major process steps and where would you find evidence for this performance

Critical LTO Processes include:

- **Safe systems of work**
- **Production management**
- **Materials management etc…..**

Example of Imperative Assessment

- Used to record scores against each LTO Performance Level
- Produces graphical outputs showing average scores for each LTO Process
- Records evidence used to determine the score

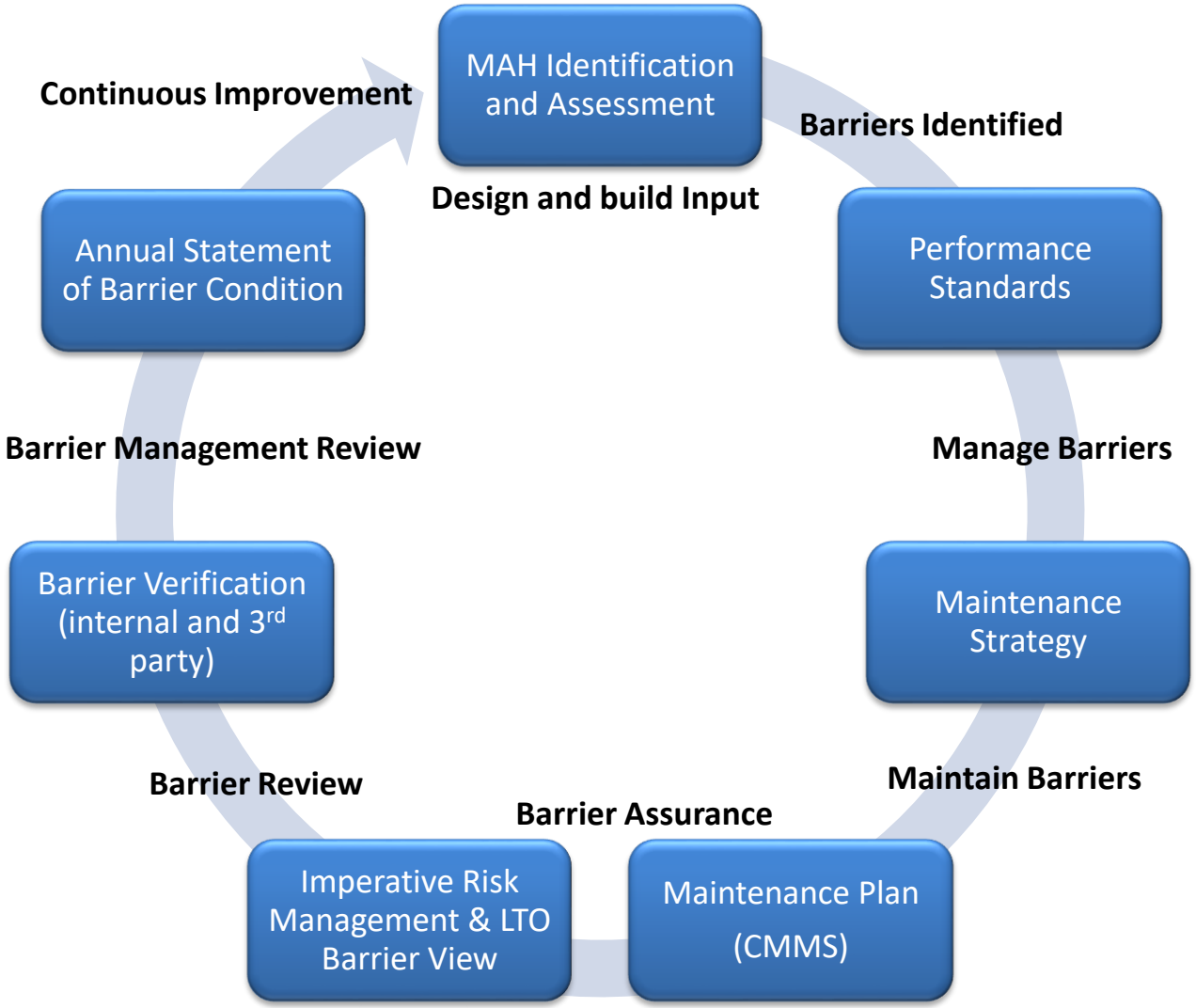


Examples of Risk That can be Turned into Barrier View

- Example: Project Output as Input to Barriers
  - Process Hazard Reviews actions
  - New Bow tie analysis
  - HAZOP & ReHAZOP actions
  - Punch List hand over items Risk Assessed….etc….
- Example: Operational Phase Input to Barriers
  - Verification, Audits actions
  - HiPo & Incident Control actions
  - Operational Risk Assessments
  - Assurance reviews actions
  - Failed SCE maintenance….etc….

- Currently these are discretely managed (many different registers) and not linked (at hazard and control level)

The Imperative Barrier Management Process



Continual Performance Monitoring of KPIs, Performance Standards, Operational Condition etc

Creating the Right Standards

Inherent Safety	Passive Controls	Active Controls	Procedural Controls
• Assess and evaluate • Process having innate lower level of danger even if things go wrong • Substitute ammonia refrigerant with propane (no toxic hazard) • Primary containment material rating is below the minimum design temperature	• Passive fire protection (intumescent coating) • Storage tank high level over flow to safe location • Bursting disc, pressure relief valve	• Engineered controls • Examples - Devices - Equipment • Systems • Vessel high level trip • Pressure vessel high pressure trip • Firewater, deluge,	• Management controls • Responsibilities • Personal competency • Permit to procedural controls • Technical operating procedures • Maintenance procedures • Emergency response procedures work procedures

"Understanding the controls"

Development of Operational Performance Standards at the correct level in line with IOGP 456

"Designing Barrier Performance Standards"

SECE & Systems → Define Goal → Define Functionality Required → Define Availability Required → Define Survivability Required → Identify Inter-dependencies → PS Defined and Documented

"Set the right standard"

Performance Standard number	M-40						
Barrier	e.g. Fire water ring main,						
Barrier owner	e.g. Operate Technical Safety Engineer						**References**
System boundaries, elements & sub-elements	*Components and boundaries of the Barrier or sub-system for which the PS is written* The scope of the Firewater Ring main includes the following: • Ring main pipework serving hydrants, deluge, and sprinkler skids. • End user's Manual isolation valves • Ring sectioning valves.						
Identified MAH scenario or event	*Refer to MAE in the Safety Case* *e.g.* Fires, explosions, toxic gas releases, escalation,						
System goal	*The goal for the Barrier or sub-system for which the PS is written* *e.g.* To provide a reliable and secure system to distribute firewater to all firewater dependent protection systems, on demand under the conditions prevailing during credible major hazard scenarios.						
P-10-F1	*Define the functional requirements of the Critical Element or sub-element* **e.g. Distribute Firewater at pressures and flows sufficient for all potential end users when a section of Fire main is impaired.**						
FUNCTIONALITY							
Ref	**Means of achieving Functional Requirement**	**Means of Assurance**	**D**	**CN**	**CM**	**O**	**References**
M-40-F1.1	Firewater main to be designed with valves for isolation of accidentally damaged sections. Suitably locate shut-off (isolating block) valves to allow sections of the fire water ring main to be isolated. The location of these valves allows easy access for operation.	Review design drawings to confirm that there are enough isolation valves to continue supply firewater in case of accidental damage to suctions of the main ring. Assurance of Fire Main isolation valve functionality confirmed by function tests carried out in as defined in the WMS.	X	X	X	X	• Firewater Ring Main Isolation Valves-Function test records. • Specifications and general arrangements drawings. • Operational Safety case • WMS procedures and records
M-40-F2 etc	**Ensure that the Firewater main system respond in all ambient conditions.**						
FUNCTIONALITY							

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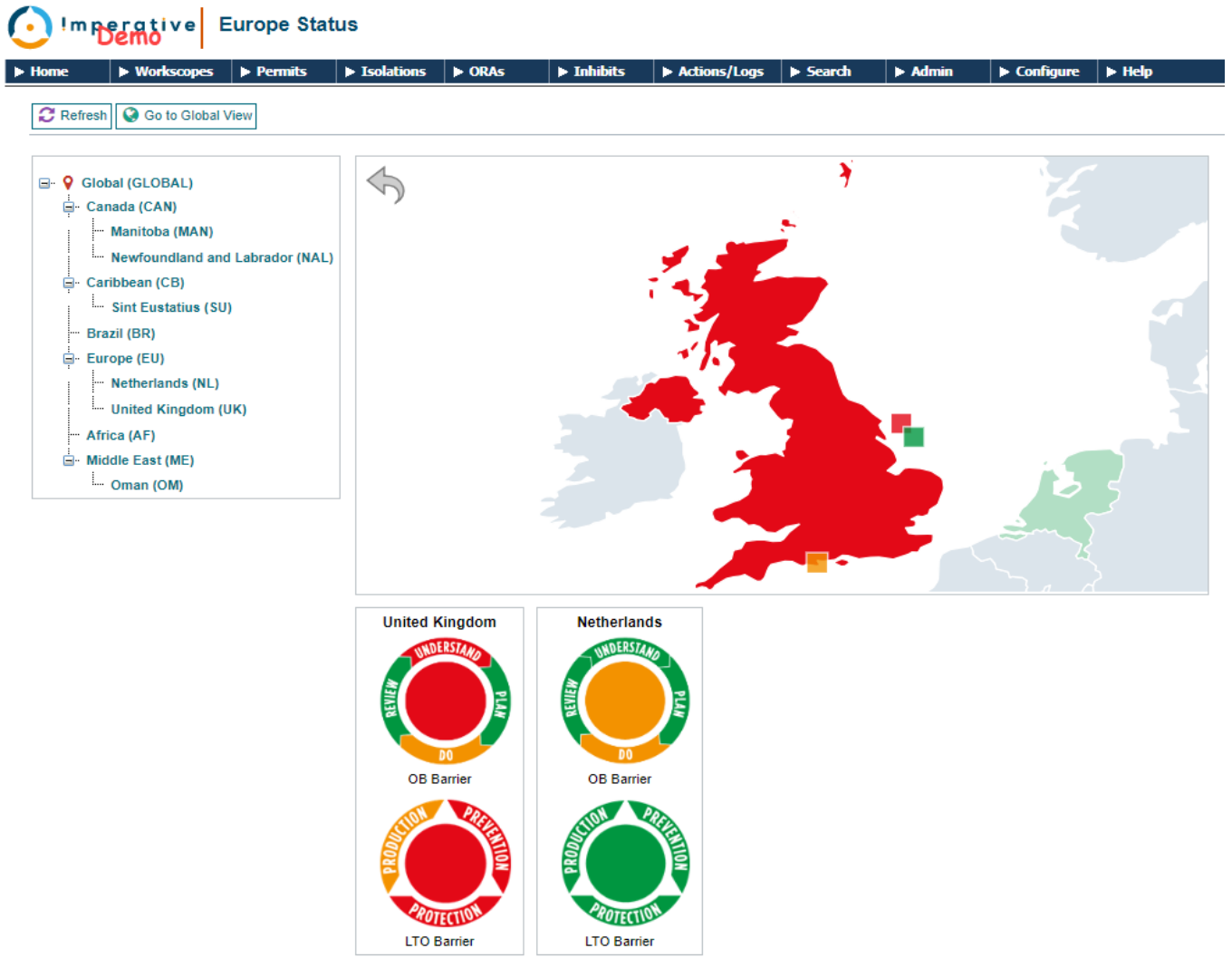
Imperative Barrier Management

Imperative Barrier Management works on two levels:

License To Operate Barriers, the daily demonstration of management of the Operational Barriers based on IOGP & API guidelines while incorporating Production and categorization of risk.

- Compliance
- Human Factors
- Operational
- Process Safety
- Deferment
- Emerging conditions

Operational Business Barriers - build out of the performance as a means of demonstrating the effectiveness and maturity of Operational Business processes



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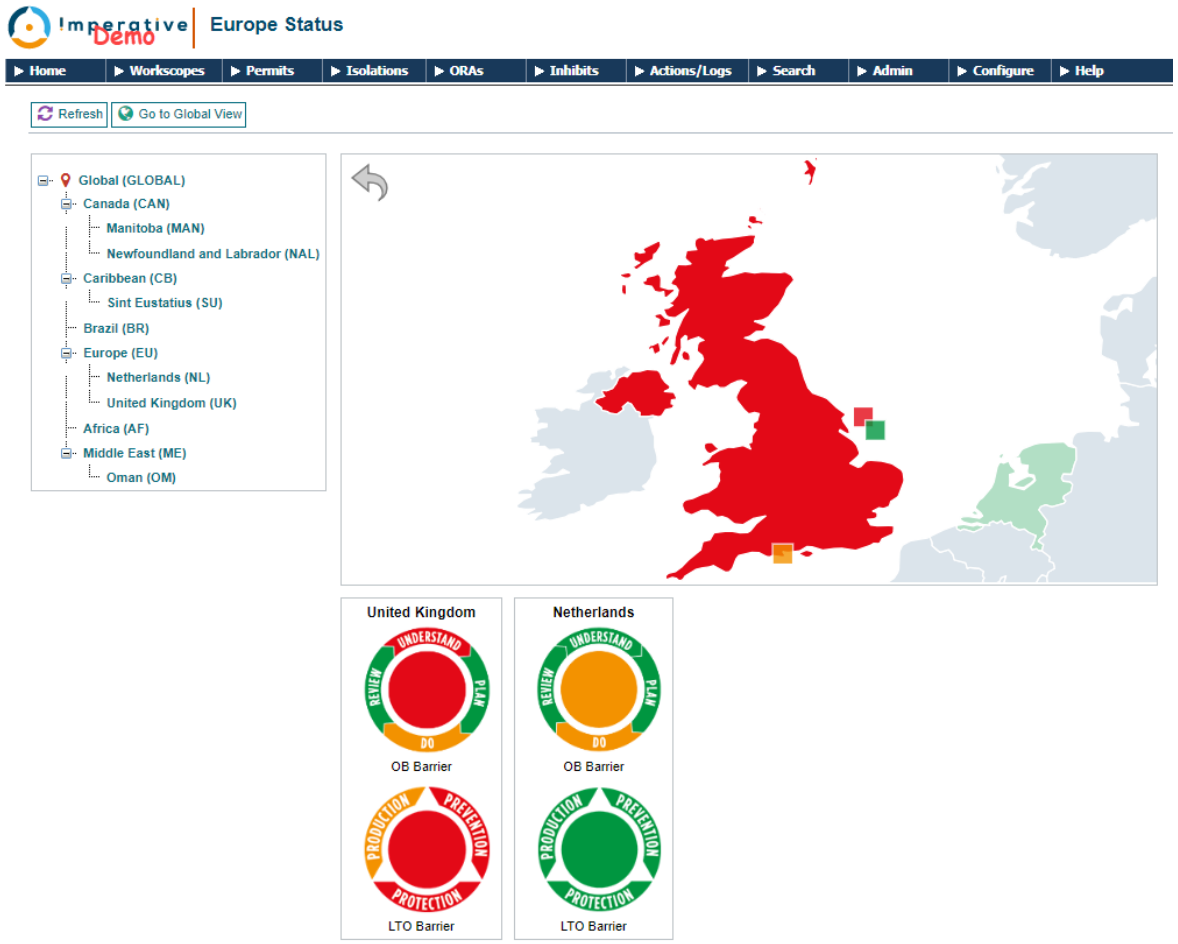
License To Operate Barrier Management

License To Operate Barrier management is active, with multiple levels of optional integrations based on the levels of availability of information.

In the following example we will discover how the utilization of data and information relates to:

- Status of the barriers
- Changing conditions and their impact on to barriers
- Risk Management
- Emerging Conditions
- Equipment Status
- Shift Log
- Using LTO Barrier with Imperative P2W



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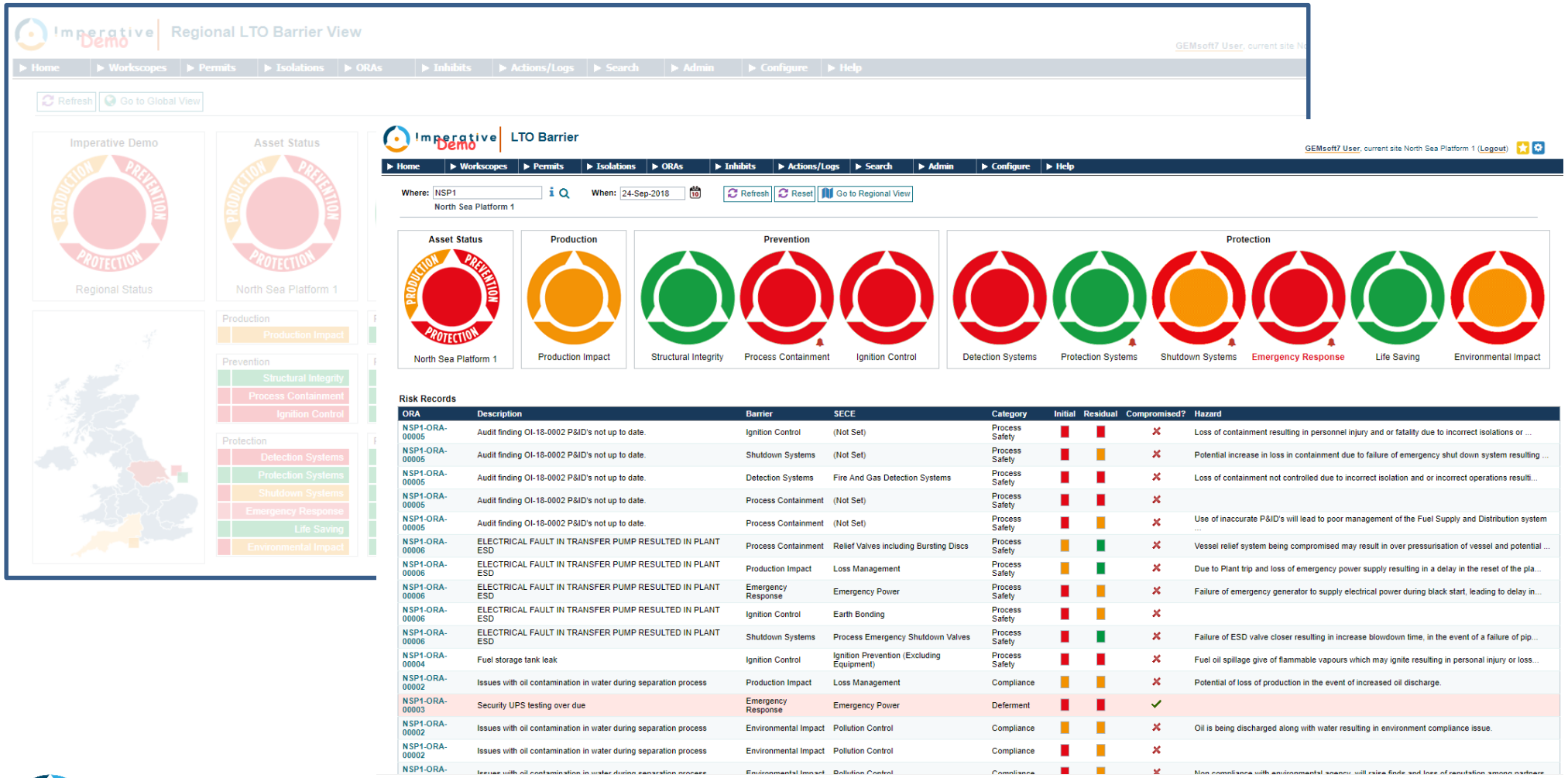
LTO Regional & Site view



Risk Records

ORA	Description	Barrier	SECE	Category	Initial	Residual	Compromised?	Hazard
NSP1-ORA-00005	Audit finding OI-18-0002 P&ID's not up to date.	Ignition Control	(Not Set)	Process Safety			✗	Loss of containment resulting in personnel injury and or fatality due to incorrect isolations or ...
NSP1-ORA-00005	Audit finding OI-18-0002 P&ID's not up to date.	Shutdown Systems	(Not Set)	Process Safety			✗	Potential increase in loss in containment due to failure of emergency shut down system resulting ...
NSP1-ORA-00005	Audit finding OI-18-0002 P&ID's not up to date.	Detection Systems	Fire And Gas Detection Systems	Process Safety			✗	Loss of containment not controlled due to incorrect isolation and or incorrect operations resulti...
NSP1-ORA-00005	Audit finding OI-18-0002 P&ID's not up to date.	Process Containment	(Not Set)	Process Safety			✗	
NSP1-ORA-00005	Audit finding OI-18-0002 P&ID's not up to date.	Process Containment	(Not Set)	Process Safety			✗	Use of inaccurate P&ID's will lead to poor management of the Fuel Supply and Distribution system ...
NSP1-ORA-00006	ELECTRICAL FAULT IN TRANSFER PUMP RESULTED IN PLANT ESD	Process Containment	Relief Valves including Bursting Discs	Process Safety			✗	Vessel relief system being compromised may result in over pressurisation of vessel and potential ...
NSP1-ORA-00006	ELECTRICAL FAULT IN TRANSFER PUMP RESULTED IN PLANT ESD	Production Impact	Loss Management	Process Safety			✗	Due to Plant trip and loss of emergency power supply resulting in a delay in the reset of the pla...
NSP1-ORA-00006	ELECTRICAL FAULT IN TRANSFER PUMP RESULTED IN PLANT ESD	Emergency Response	Emergency Power	Process Safety			✗	Failure of emergency generator to supply electrical power during black start, leading to delay in...
NSP1-ORA-00006	ELECTRICAL FAULT IN TRANSFER PUMP RESULTED IN PLANT ESD	Ignition Control	Earth Bonding	Process Safety			✗	
NSP1-ORA-00006	ELECTRICAL FAULT IN TRANSFER PUMP RESULTED IN PLANT ESD	Shutdown Systems	Process Emergency Shutdown Valves	Process Safety			✗	Failure of ESD valve closer resulting in increase blowdown time, in the event of a failure of pip...
NSP1-ORA-00004	Fuel storage tank leak	Ignition Control	Ignition Prevention (Excluding Equipment)	Process Safety			✗	Fuel oil spillage give of flammable vapours which may ignite resulting in personal injury or loss...
NSP1-ORA-00002	Issues with oil contamination in water during separation process	Production Impact	Loss Management	Compliance			✗	Potential of loss of production in the event of increased oil discharge.
NSP1-ORA-00003	Security UPS testing over due	Emergency Response	Emergency Power	Deferment			✓	
NSP1-ORA-00002	Issues with oil contamination in water during separation process	Environmental Impact	Pollution Control	Compliance			✗	Oil is being discharged along with water resulting in environment compliance issue.
NSP1-ORA-00002	Issues with oil contamination in water during separation process	Environmental Impact	Pollution Control	Compliance			✗	
NSP1-ORA-								

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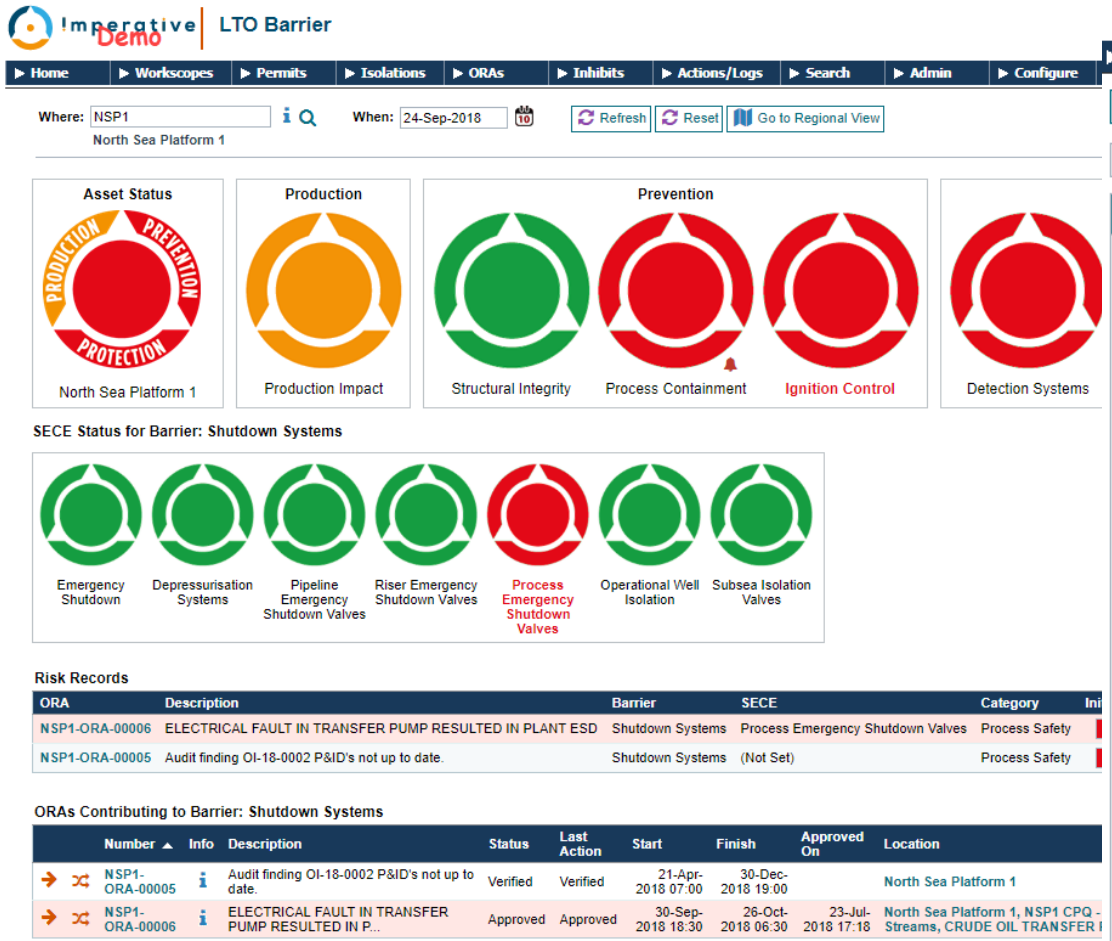
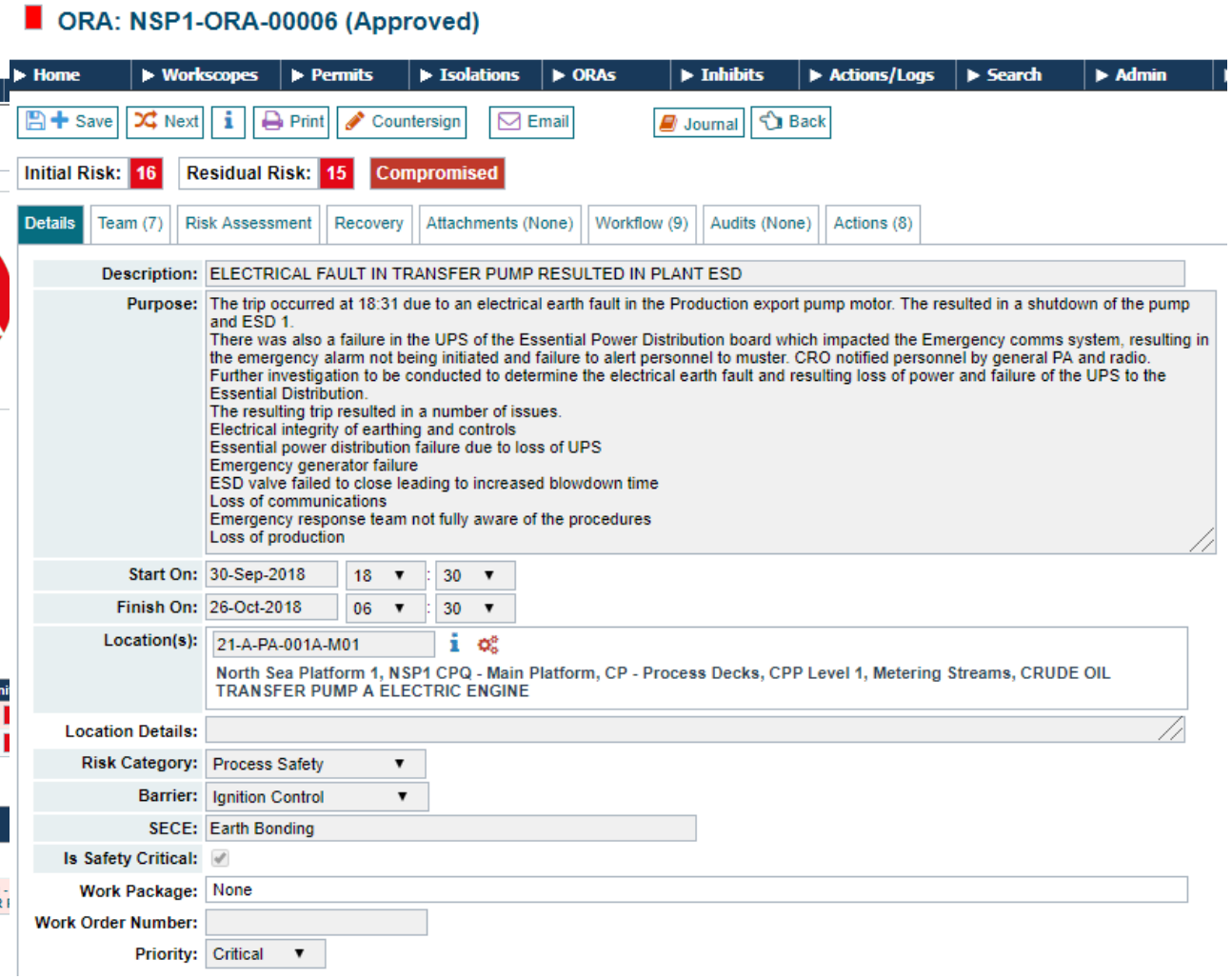
LTO Barrier change in Condition





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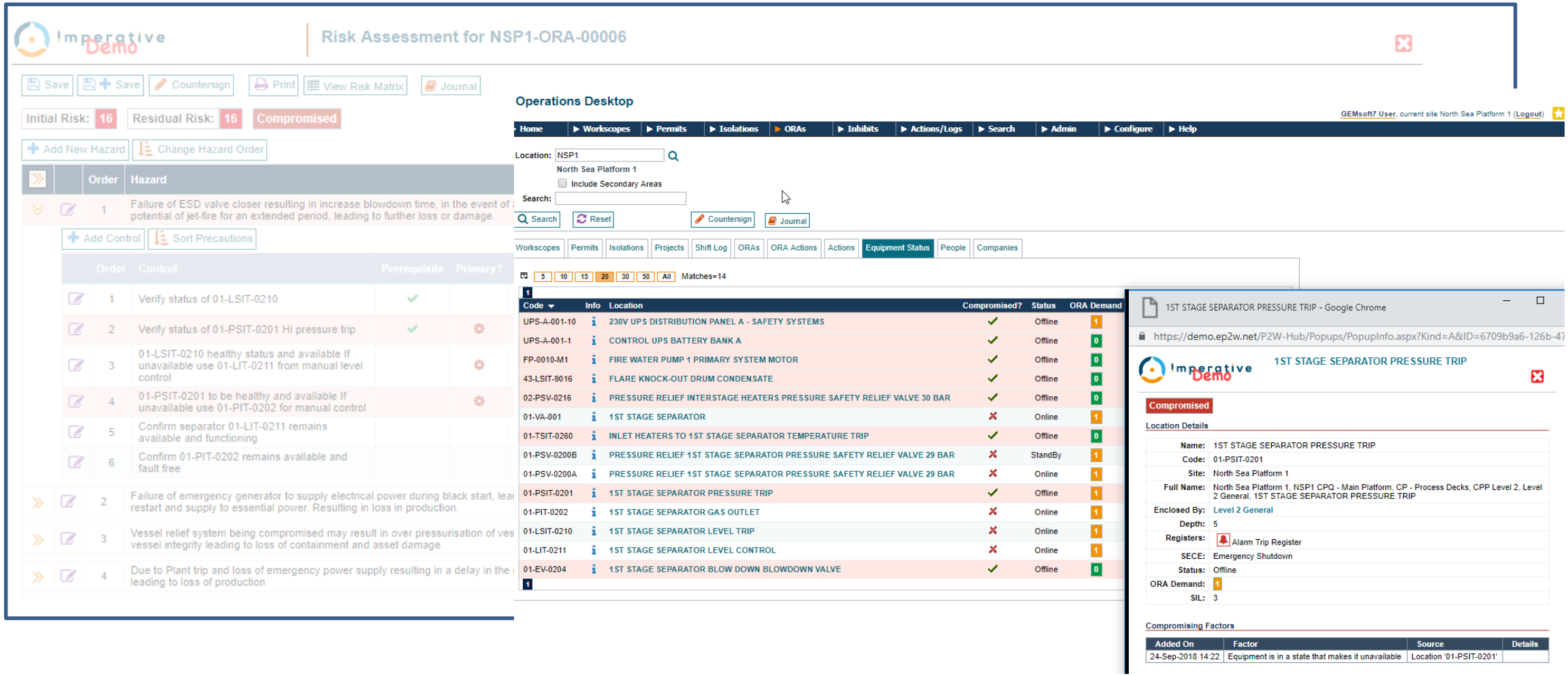
LTO Barrier Risk Assessment & BowTies Change in Condition



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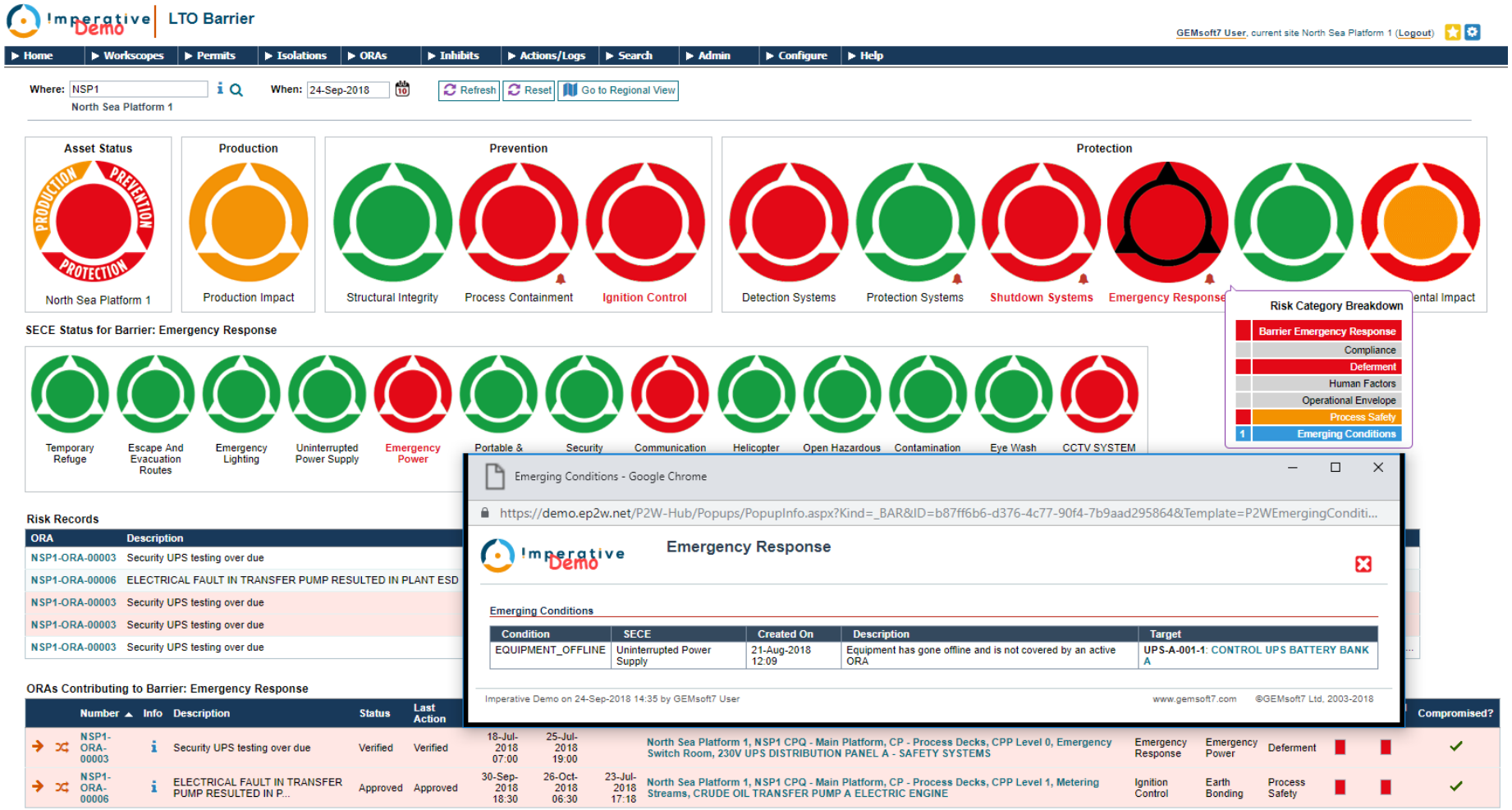
LTO Barrier Management Emerging Conditions



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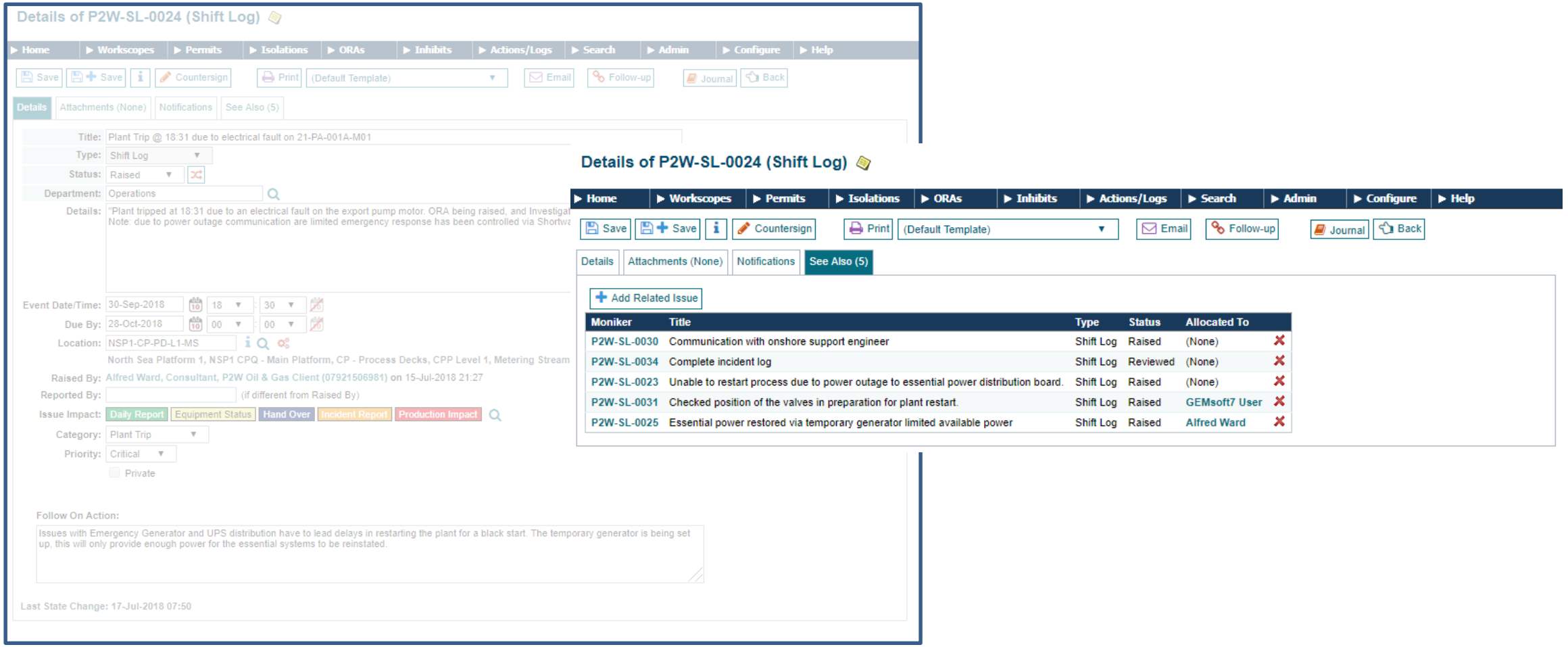
Shift Log



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LTO Barrier and P2W

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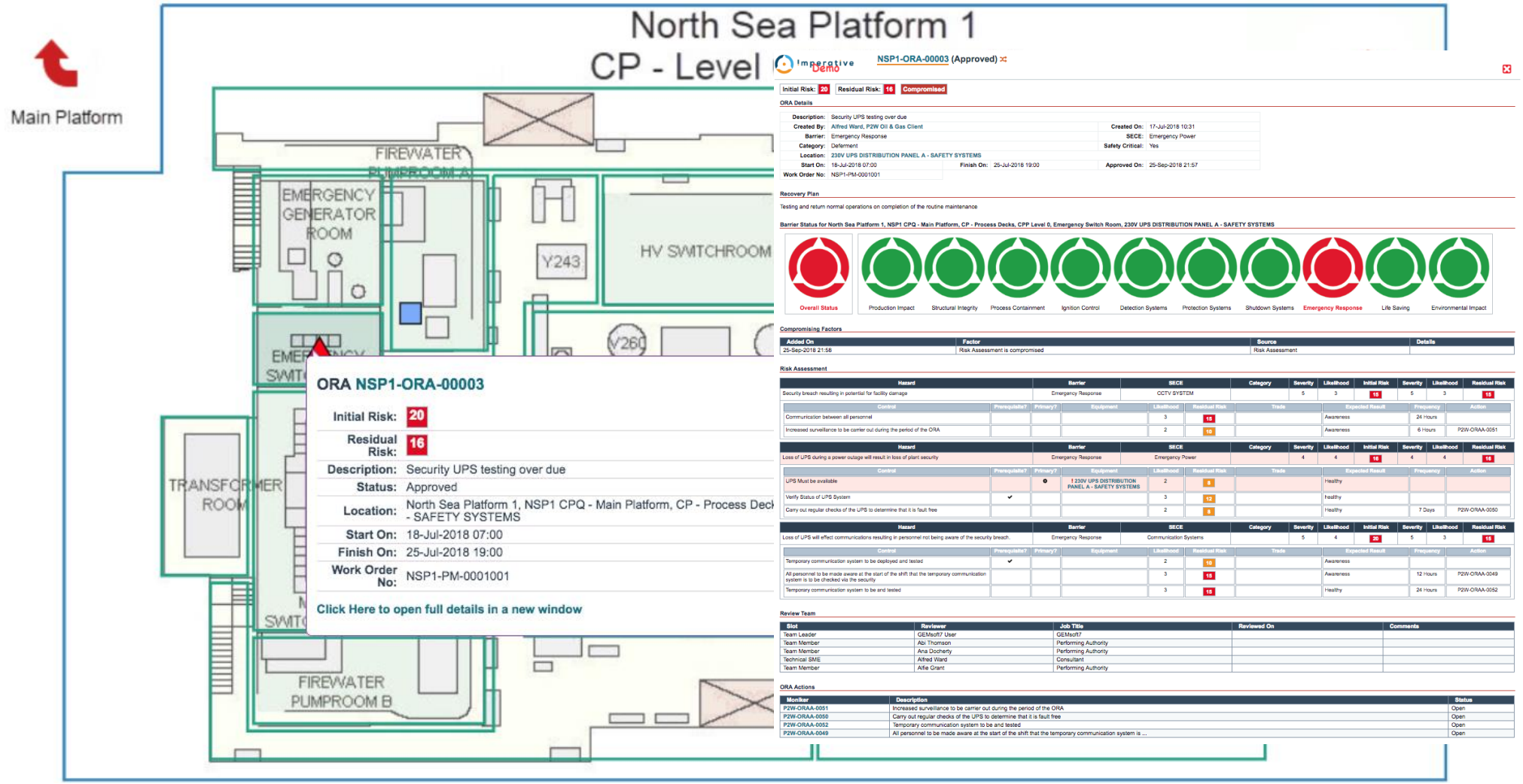
ORA and P2W Schematic View



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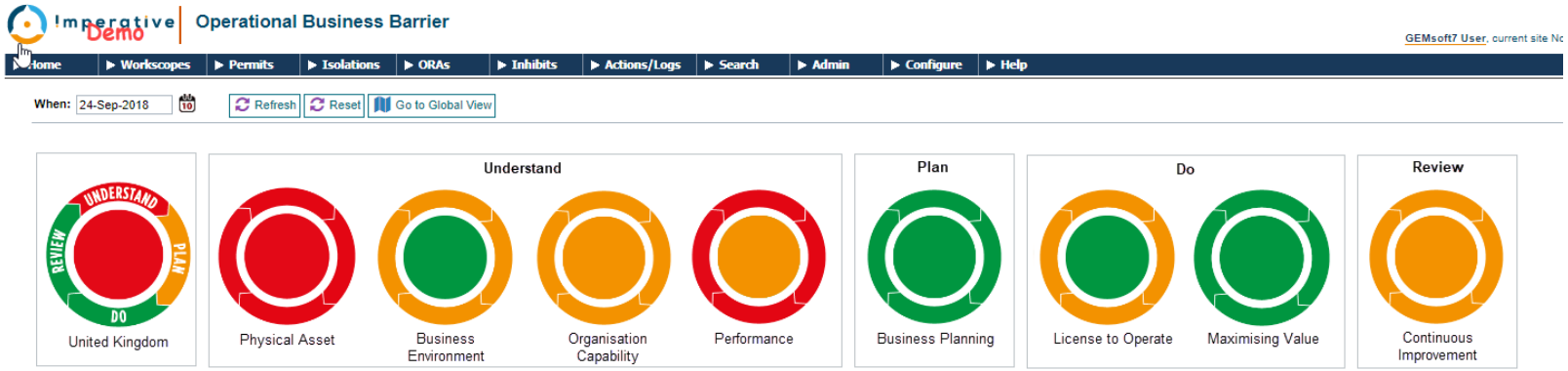
Imperative Operational Business Barrier

Structured around;

- **Understand**
  - Physical Asset
  - Business Environment
  - Organisation Capacity
  - Performance
- **Plan**
  - Business Planning
- **Do**
  - License to Operate
  - Maximising Value
- **Review**
  - Continuous Improvement

In this example there are a number of findings based on the level of maturity that have been assessed via the Imperative Risk Assessment process.

Leads to improvement plans being raised through the process of risk evaluation.



Risk Records

IBRA	Description	Barrier	Element	Initial	Residual	Compromised?	Hazard
UK-IBRA-00010	Project Management under delivering	Physical Asset	Handover from Project			✕	Poor contractor interface in verification of deliverables
UK-IBRA-00010	Project Management under delivering	Physical Asset	Data & Documentation to support the Asset			✕	Inaccurate data leading to operational issues during safe operations.
UK-IBRA-00010	Project Management under delivering	Business Environment	Contracting Frame work			✕	Poor contractor management, leading to under delivery of scope
UK-IBRA-00010	Project Management under delivering	Business Environment	External Regulations			✕	None conformance leading to improvement notice
UK-IBRA-00010	Project Management under delivering	Business Environment	Partnerships and JVs			✕	Reputational damage between company and JV Partners
UK-IBRA-00010	Project Management under delivering	Organisation Capability	Training & Competency			✕	Personnel not being provided with appropriate training to manage change to operating conditions
UK-IBRA-00011	Change in Business Objectives	Organisation Capability	Organisational Structure			✕	Operating personal structure does not deliver the objectives of the business objectives
UK-IBRA-00011	Change in Business Objectives	Organisation Capability	Roles & Responsibilities			✕	Undefined roles and responsibilities leading to personnel in the wrong positions and/or incorr...
UK-IBRA-00012	Competency Management not defined	Organisation Capability	People Performance			✕	Personnel not provided with the correct performance targets
UK-IBRA-00012	Competency Management not defined	Organisation Capability	Roles & Responsibilities			✕	Undefined roles and responsibilities leading to personnel in the wrong positions and/or incor...
UK-IBRA-00010	Project Management under delivering	Performance	Cumulative Risk			✕	Increased risk not defined due to punchlist items not clearly defined or assessed.
UK-IBRA-00010	Project Management under delivering	License to Operate	Activity Screening & Selection			✕	Project selection based on in complete or inaccurate information leading to poor solution selection
UK-IBRA-00011	Change in Business Objectives	Continuous Improvement	Lessons Learned			✕	Poor analysis on lessons learned from previous organisational changes being poorly implemented

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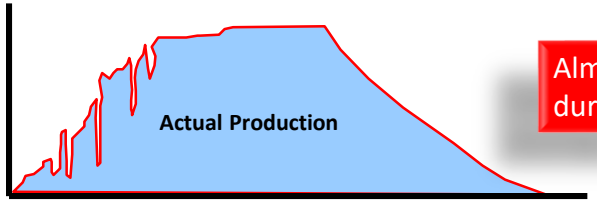
Why Imperative OAR and Barrier Management is so Important to Project Success

Successful Projects – conventional thinking:

- ☑ No Safety Incidents
- ☑ Benchmark Technical Cost
- ☑ Within Budget
- ☑ On Schedule (first oil/gas)

=Conventional Start-Up Profile



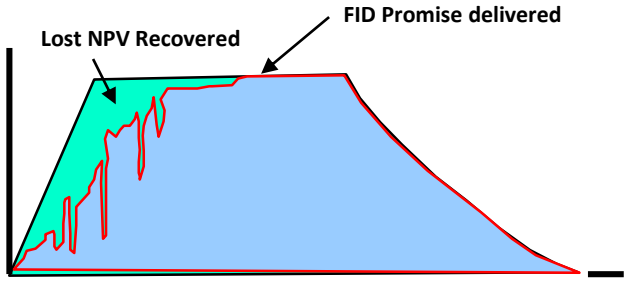
Almost 2/3 of "Operational Risks" are actually introduced during Select / Define phases.

OAR & Barriers Managed through Phases using Imperative

Assess	•High Level Operations and Maintenance Principles Defined as input to the project •These can impact Concept Decisions
Select	•Detailed O&M Philosophy •Identification of Barriers
Define	•Growing and assuring the Operations Input via the Philosophy •Populating the Barrier View
Execute	•Turning the Philosophy Into Standards under a defined OMS and LTO defined •Populating the LTO Barrier View For Start-Up
Operate	•Maintaining the LTO and Optimising Performance •Maintaining the LTO Barriers

Start up Profile With Imperative OAR & Barrier = Real Project Success

- ☑ Safe & reliable handover to operations
- ☑ Deliver the "FID Life Cycle Promise"



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The Imperative O&M Philosophy

The O&M Philosophy is a set of principles by which we shall operate e.g.

Production

"Off spec gas from dehydration units **shall not** be flared, instead it will be diluted within the main transportation system"

Maintenance

" During planned shutdowns of an LNG train, maximum number of Upstream facilities **shall** also shutdown, up to the equivalent gas capacity of the LNG train"

Organisation

"O&M workers assigned to a Central Processing Plant **shall** also operate and maintain all connected Compression and Well facilities"

Risk & Barrier Management

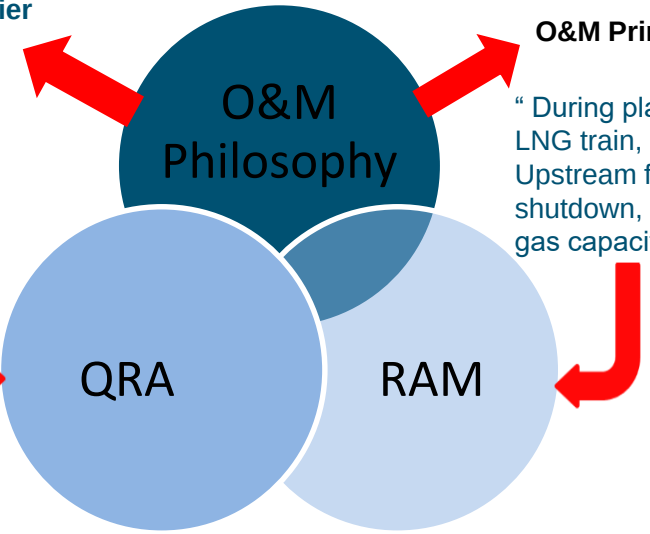
"O&M workers ***shall*** have a Risk and Barrier Management Process/Tool to manage risk and maintain safe commissioning, start up and operation"

Relationship with other Deliverables

The O&M Philosophy principles are key assumptions for RAM, QRA and Barrier Management
RAM and QRA are inextricably linked to O&M Philosophy and all three must be wholly consistent at all times

O&M Principle: Risk &Barrier Management

"O&M workers shall manage and mitigate operational risk that impairs barrier health"

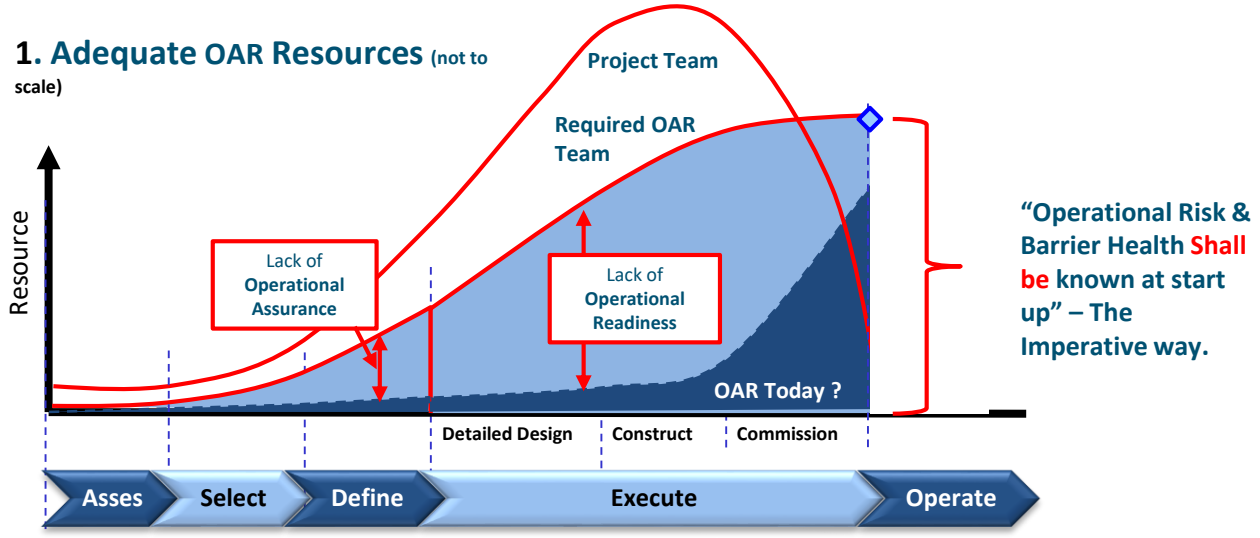


Manning Distribution Assumption

O&M Principle: Maintenance

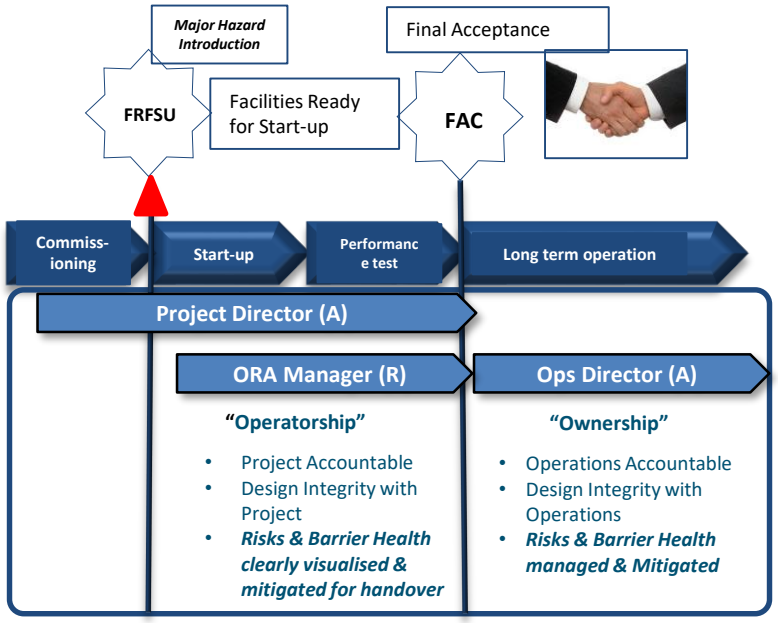
" During planned shutdowns of an LNG train, maximum number of Upstream facilities **shall** also shutdown, up to the equivalent gas capacity of the LNG train"

Imperative OAR Organisation & Resources



- Lack of OAR Resource in Front End : Impacts Operational Assurance (O&M Philosophy delivery)
- Lack of OAR Resource in Execute : Impacts Operational Readiness (People, Processes, Contracts, ***RISK & BARRIER HEALTH MANAGEMENT…..***)
- Barrier Health for start up is developed through the commissioning phase:
  - Punch-lists and left over scope leave barrier impairment. E.g. Instrumentation not all functioning will mean high levels of alarms…….

FAC: Final Acceptance Certificate



No one size fits all, pragmatic approach!

- Need FAC framework – see opposite
- Aspire for NO carry over scope to Ops
- Collaboration between Project & Ops
- Cost benefit of retaining Project Organisation
- ***Manage and Mitigate Operational Risk and Assure Barrier Health***

FAC Framework

Item	Aspiration	Contingency
Ops Safety Case	Delivered	N/A
VOR Dossiers	Signed Off	N/A
Performance Tests	Turndown to Nameplate	Scope / Budget / Resource to Ops/**Risk & Barrier Health Mitigated**
TQ's / Variations	Cleared	Scope / Budget / Resource to Ops)/ **Risk & Barrier Health Mitigated**
Punchlists	Cleared	Scope / Budget / Resource to Ops (No B items)/ **Risk & Barrier Health Mitigated**
Data Transfer	Transferred all As Builts	N/A
Warranties / Claims	Transferred / cleared	N/A
Dispensations	Cleared	Scope / Budget / Resource to Ops/**Risk & Barrier Health Mitigated**
Other Assurance Actions	Closed (all High items)	Scope / Budget / Resource to Ops/ **Risk & Barrier Health Mitigated**
Operational Spares	Delivered	Scope / Budget / Resource to Ops

Further Things to Remember!

- Project to Asset transfer is a combined transition and handover process where ***risks and assurance measures not met must be mitigated for safe start up***
- Early alignment on content and format of handover is essential, ***Operational Risk & Barrier Health is critical for inclusion***
- The facility transitions are always complex and require significant effort to be fully effective. ***An effective tool for Barrier Health makes this process less arduous***
- Not managing the handover process will delay Final Acceptance
- ***Not managing project to asset risk picture exposes a potential***
    - ***for safety incidents and/or equipment failure***

- Champion the PtA Process
- ***Support the development of Risk Assessments & Barrier Management pre Start Up***

Imperative Success Factors

- Ensure that assessment is honest and fair to establish where things are going well, and where they need to do better
- Ensure benchmarking is fairl (comparing apples with apples)
- Actively analysing assessment findings to validate and mitigate business risks and prioritise business improvement opportunities
- Use Imperative as the framework for all of our conversations and as a reference point for driving greater integration
- To take value-based action to bridge any gaps by either asking for help or helping ourselves

Summary: Key take-away messages

Imperative

1. Will help Companies determine how well they are delivering the basics well
2. Will Define & Align to Licence to Operate Criteria
3. Provides Insight & Consistent approach to ensure we meet minimum regulatory requirements and Company Standards
4. Supports Standardised Asset and Portfolio Operational Assurance
5. Actively Manages Risk and Identifies Opportunities
6. Enables Integration of existing and historic Company processes, tools and systems