An Introduction to Operations Readiness & Assurance (OR&A)
Reduced Costs
Improved Efficiency
Reduced Risk
Improved Management
Real-Time Assurance

Optimised Outcome
Flawless Start-Up
Lower OPEX
Improved Operability
Improved Production Revenue

… will your project be ‘Ready to Operate’ ?
The ‘Big Picture’ as shown above, is an illustration used to depict the interaction of Project and Operations teams over the entire life cycle of an asset.
Founder and CEO of Independent Project Analysis (IPA) Inc., Edward W. Merrow is a recognized expert on the development and execution of large and complex megaprojects built on decades of research into the challenges of these complex investments.

This publication ‘Industrial Megaprojects’ identifies principles common to Project Management and OR&A in particular.

Merrow begins by asking four simple questions ...

- **Will it be built and started up safely**
- **Will it be built within the agreed budget (±25%)**
- **Will it be completed on schedule (±25%)**
- **Will it achieve the stated design intent in terms of sustained operation, performance and output**

Merrow concludes that only a positive response to ALL of these questions would constitute a successful project.
The book, ‘Industrial Megaprojects’, proposes a number of management concepts, strategies and practices that can be used to reduce the risks of a failed project.

Merrow’s suggestions include ...

- Creating a robust management system to deploy proven and effective processes and procedures
- Arrange the processes and procedures into a structured and disciplined management process
- Ensure that the project is properly framed (assessed and shaped) into a stable platform
- Ensure the venture is led and supported by the executive (senior) management team

He also concludes that being able to ‘pursue a common goal with clarity and good behaviour’ is key to doing projects well.
The Project team typically regards the point of handover, after a short Performance Test, as the end of the story.

This does not mean starting up the asset on time is not important.

It does mean that a smooth, first time start-up and a steady ramp-up to the design intent performance, followed by a sustained period (years) of steady state operation is very important to the financial success of the asset.

However, if the production license term is shorter than the Life of Field, any failure to produce product represents LOST REVENUE that can never be recovered.
Achieving ‘Ready to Operate’

Achieving ‘Ready to Operate’ requires the development and exchange of a large amount of information between the Project Team, Engineering Team, Construction Team and Operations Team.

This scope of work falls into three categories, managed by three different teams:

1. **Project Deliverables**
   as identified in the contract documents, e.g. design & construction and commissioning activities, delivery of supporting documentation from design team, vendors & suppliers (and sometimes start-up and performance testing of the completed asset).

2. **Operations Requirements, advice and contributions to the Project**
   e.g. checking operability, maintainability, reviews and output of design, confirming modes of operation of equipment, participation in HAZID, HAZOP, FAT, SAT, punch-listing, commissioning & start-up activities.

3. **Operations needs that are not Project Deliverables**
   e.g. readiness of Operations Team, ISSOW implementation, rationalisation of long term spare parts, training and competence of Operations Team and Operations, Management Systems.

Managing this interchange is no easy activity and needs a robust process to ensure everything is addressed, prepared to the appropriate level of quality and completeness and subsequently delivered to the end user in a timely manner.
The stated purpose of the Operations Readiness process is:

“To prepare the custodians of an asset under construction (and the supporting organisation) such that, at the point of delivery and handover, the Asset Organisation is fully prepared to assume ownership of the asset, accepts responsibility for, (and is capable of), performing the safe and efficient operation of that asset in a sustainable and environmentally friendly manner.”

In other words, achieving … ‘Ready to Operate’ status.
Operations Readiness means ...

the asset has achieved ‘Ready to Operate’ status, i.e.:

- Construction of the asset is complete
- The asset meets the design intent
- The operator is prepared to assume ownership
- The operator accepts responsibility for operation
- The operator is capable of safe and efficient operation
Assurance means …

- The asset satisfies the clients requirements
- Commissioning and testing is complete
- The asset organisation is established and ready
- All operational risks are reduced to ALARP
- Technical Integrity has been established (and can be maintained)

… or will be at the point of handover.
Over the Life-Cycle of an asset, different groups are involved at different times and for different reasons, with different tasks and targets.

The OR&A process is used to ensure that nothing is lost in interfaces, communication or interaction at any stage.
Achieving ‘Ready to Operate’ with OR&A

This diagram illustrates the many areas of influence of OR&A and how they relate to the Operate phase requirements of the completed asset.

Some are simple 1- to - 1 connections, some are 1 to many connections; and some have no connection at all.
Achieving ‘Ready to Operate’ with OR&A

MONITOR
the deliverables from the EPC to ensure quality, completeness and timely delivery to Operations

PROVIDE
Operations input, guidance and advice to EPC to ensure completed asset fulfils Operations Requirements

ENSURE
Operations Team is ready to operate the asset in a safe, sustainable and environmentally responsible manner

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Why Deploy OR&A

To ‘bridge the gap’ between the project team and the client and to monitor, manage and assure:

- The clients requirements (from the design stage)
- Management of the project / client interface
- Involvement of operations team in commissioning and start-up
- Preparation of the asset organisation
- Performance testing, handover and acceptance
Is this extra work?

The simple answer is … NO

• The OR&A process identifies the client requirements
• The clients requirements are part of the EPC contract
• The project team are responsible for delivering the EPC contract
• The OR&A process monitors delivery of the client requirements
• The work of the project team is limited to reporting progress (as they would normally be required to do)
Structure of the OR&A Solution
Project Timeline

The time-line used by every structured project is divided into a number of phases, each named to indicate their purpose, beginning with identification of the initial project concept through to achieving full operation.

The transition from phase to phase is normally controlled by some decision mechanism such as a Decision Gate which incorporates a health check, review or audit.

The OR&A process emulates this, using this same basic project timeline, matching the activities needed to complete specific Operations Requirements to the relevant project phase.
## OR&A System WBS Structure

### OR&A System Index

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<th>OR&amp;A Subjects</th>
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<td>1.05 Cost Estimates (OPEX) Management</td>
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<td>2. Asset Organisation</td>
<td>2.01 Asset Organisation</td>
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<td>4.11 Supply Chain Management (SCM)</td>
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<td>4.12 Marine Systems &amp; Facilities</td>
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<td>5.01 Commissioning &amp; Start-Up (CSU)</td>
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<td>5.02 Flawless Project Initiatives (FPI)</td>
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<td></td>
<td>5.03 Handover &amp; Acceptance</td>
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Delivery Map

4.02 Refining Processes & Systems

A: IDENTIFY
B: FRAME
C: SELECT
D: DEFINE
E: EXECUTE
F: OPERATE

B40201
Participate in identification of possible Sub-Sea facilities, concepts and options

C40201
Determine design and service conditions for proposed Pipelines and/or Gathering Systems for each concept

D40201
Develop Operations Requirements for selected Pipelines and Gathering Systems

E40201
Confirm Operations Requirements for Pipelines and Gathering Systems are included in Detailed Design

F40201
Participate in Handover and Acceptance activities for Pipelines, Manifolds and Gathering Systems

B40202
Participate in Sub-Sea and Pipelines Feasibility activities to identify Operations risks, requirements and opportunities

C40202
Participate in a preliminary review of Pipelines and Gathering Production Systems

D40202
Define operating parameters and Integrated Operating model for Pipelines and Gathering Systems

E40202
Participate in Operability and Maintainability Review of Pipelines and Gathering Systems design

F40202
Participate in Lessons Learned workshop for Pipelines, Manifolds and Gathering Systems

C40203
Contribute to evaluation of materials to be used for Pipelines and Gathering Systems for each concept

D40203
Contribute to selection of corrosion monitoring and protection requirements for Pipelines and Gathering systems

E40203
Identify specific Operations Team training requirements for Pipelines, Manifolds and Gathering Systems facilities

F40203
Identify specific Operations Team training requirements for Pipelines, Manifolds and Gathering Systems

C40204
Contribute to concept selection process for Pipelines and Gathering Systems

D40204
Confirm specification of appropriate Inspection and Testing requirements included in BID and ITT for FEED

E40204
Confirm delivery of Documents for Operations (DFO) deliverables to Operations Team

F40204
Confirm delivery of Documents for Operations (DFO) deliverables to Operations Team

C40205
Contribute to evaluation and selection process for pipeline routing and ‘Right of Way’ permissions

D40205
Confirm that Pipelines and Gathering Systems and components are included in Asset Integrity Plan and Asset Register

E40205
Develop Commissioning and Start-Up Plan and procedures for Pipelines, Manifolds and Gathering Systems

F40205
Develop Commissioning and Start-Up Plan and procedures for Pipelines, Manifolds and Gathering Systems

C40206
Contribute to development of OPEX estimates for selected Pipeline System option

D40206
Confirm that design of the Pipelines and Gathering Systems complies with Operations Isolation Philosophy

E40206
Develop Integrated Operating Procedures Manuals (IOPM) for Pipelines, Manifolds and Gathering Systems

F40206
Develop Integrated Operating Procedures Manuals (IOPM) for Pipelines, Manifolds and Gathering Systems

C40207
Participate in HAZOP activities and studies for Pipelines and Gathering Systems

D40207
Participate in HAZOP activities and studies for Pipelines and Gathering Systems

E40207
Confirm implementation of ISSOW, SIMOPS & MoPO for Pipelines, Manifolds and Gathering Systems

F40207
Confirm implementation of ISSOW, SIMOPS & MoPO for Pipelines, Manifolds and Gathering Systems
At the lowest level, accessed the button on the relevant Activity screen of the OR&A Solution displays an Detail Sheet for each respective Activity.

### E10203 Develop Quality Management System (QMS) for OPERATE phase

<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td>Preparations for the work to be done in the OPERATE phase by the Operations Team should also be regulated to achieve the necessary quality objectives and the necessary quality output requires the adoption and implementation of a robust Quality Management System from the beginning of the OPERATE phase after the handover of the completed asset to the Operations Team. The Operations Quality Management System (QMS) processes and procedures must be clearly documented in a QMS Manual and these must be implemented by the Operations Team from the outset.</td>
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<th>Preceding Activities</th>
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<td>E10202</td>
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<th>Tools</th>
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<td>OR&amp;A Solution, ORDITA</td>
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<tr>
<th>RACI</th>
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<tr>
<td>Responsible: OR&amp;A Manager</td>
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<tr>
<td>Accountable: Project Manager (or Operations Manager)</td>
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<td>Consulted: Project Management Team, Operations Management Team</td>
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<tr>
<td>Informed: Project Team, Operations Team</td>
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<tr>
<th>Outputs</th>
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<tr>
<td>Quality Plan for OPERATE phase</td>
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<td>Quality procedures for OPERATE phase</td>
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<tr>
<td>QMS Manual for OPERATE phase</td>
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<tr>
<th>Risks</th>
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<tr>
<td>Failure to adopt and implement a robust QMS for the OPERATE phase risks sub-optimal maintenance of, or loss of, Technical Integrity leading to poor asset reliability and performance.</td>
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<tr>
<th>KPI</th>
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<tbody>
<tr>
<td>Quality Management System (QMS) for OPERATE phase ready for implementation immediately after handover.</td>
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<table>
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<tr>
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<tbody>
<tr>
<td>OR&amp;A Solution, ORDITA</td>
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</table>

The Detail Sheet shows the Activity Number and the title of the Activity. Further supporting information is also provided to guide the user in completing the activity. This takes the form of a description of the activity and the outputs, risks and KPI. This page also shows the typical RACI chart for the activity.
Selecting a Phase tab from the Project Summary screen allows the user to select a more detailed screen for a specific Activity.

Navigation to a specific Activity is achieved from the expanding menu at the left side of the Activity Dashboard Screen.

When the required Activity is selected, the screen is updated to display information for that Activity.

From this display, the user can monitor and manage the specific Activity, recording progress, comments, potential Lessons or Peer Advice and apply Deviations against an Activity or Task.
At the lowest level, accessed the button on the relevant Activity screen of the OR&A Solution displays an Detail Sheet for each respective Activity.
## OR&A Demonstration

### Getting Started Guide
- **Or&N Overview**
- **Terms & Conditions of Use**
- **About User Levels**
  - User Level Points Accumulation
  - Points History
- **OR&A System Structure**

### 1. History of Structured Management
- **The Origins of OR&A**
- **The Industrial Revolution**
  - Frederick Winslow Taylor
  - Henri Fayol
  - Max Weber
  - Henry Ford
  - Clarence Irving Lewis
  - Walter A. Shewhart
  - W. Edwards Deming
  - Donald A. Fisher
  - Edward W. Deming

### 2. Project Challenges
- **Major Projects & Mega Failures**
- **Project Timeline**
- **Cost Drivers (CEPs)**
- **Business Case for Using OR&A**
- **CARE vs. OR&N**

### 3. Lessons Learned & Best Practices
- **Lessons Learned System (LLS)**
  - Best Practices
  - Skeleton Documents

### 4. Knowledge Management
- **Explicit Knowledge**
- **Tacit Knowledge**
- **Organizational Knowledge**
- **Knowledge Management in OR&A**

### 5. Introduction to OR&A
- **Definition of OR&A**
- **OR&A Pre-Requisites**
- **Developing an OR&A Capability**

### 6. About the OR&A Process
- **Management of the OR&A Process**
- **Corporate Information Structure**
- **OR&A Information Structure**
- **OR&A Timeline**
- **OR&A Solution - Project Selection Screen**
- **OR&A System Index**
- **OR&A Delivery Map**
- **Activity Membership Scheme**
- **OR&A Concept**
- **Setting Up OR&A for a Project**
- **Managing OR&A Progress**
- **Finer Points Projects**

### 7. OR&A System Hierarchy
- **Key OR&A Concepts**
  - Context Sensitive Delivery
  - Accessing OR&A
  - Deviation
  - The Daily to Devise

### 8. More about OR&A
- **OR&A Main Groups**
  - OR&A Library
  - Contact OR&A Ltd.

### 9. Using OR&A
- **Getting Started with OR&A**
  - Project Summary Screen
  - Activity Dashboard
  - Phases & Groups
  - Subject & Activities
  - Tasks & Notes
  - Recording Task Progress
  - Recording a Comment
  - Task Fair Share
  - Deviation
  - Potential Lessons Learned
  - FIRST (Fires, Issues & Risks Synthesis Tool)
  - User Guide
  - Outputs/Reports
    - OR&A Plan
    - OR&A Dashboard Report
    - OR&A Gantt Report
    - OR&A Comments Report
    - Potential Lessons Report
    - Deviation Report
    - No Progress Report
    - OR&A Weekly Report
    - OR&A Monthly Report

### 10. Interpreting OR&A Output
- **Reviews & Audits**
- **Operators (Population) Assurance BS EN ISO 2005**
- **Providing Assurance with OR&A**

### 11. OR&A e-Learning System
- **Introduction to e-Learning**
  - Level 1 - OR&A Orientation
  - Level 2 - Advanced OR&A Orientation
  - Level 3 - OR&A Practitioner
  - Level 4 - Senior OR&A Practitioner
  - Level 5 - OR&A Lead
  - Level 6 - OR&A Manager / Advisor / Auditor

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Selecting the icon to generate an OR&A Plan creates an .XML file which can be easily imported into any standard Project Planning application such as MS Project or Primavera.

*(MS Project illustrated above)*

The .XML file contains the entire WBS for the OR&A Solution and uses the Project Phases as the Timeline. This allows the Project Planner to import the OR&A Plan into the Integrated Project Plan and align the milestones with minimal effort.
Selecting the Reports tab from the Project Summary screen allows the user to generate a report from the ORDITA system.

All Reports are instantaneous snapshots of the current status, with all information entered by every user immediately available.

All Reports are generated as MS Office files and can be edited by the user (except the OR&A Plan which is an XML file).

All files are automatically named (using the Project Name) and the Date and Time the Report is generated.
ACTOR

Assurance Comparator Tool for Operations Readiness
The ORDITA system includes a special overview which allows those OR&A teams responsible for managing a portfolio of related or similar projects.

The ACTOR tool enables the user to display key project parameters for a selection of projects in a side-by-side display so that a quick comparison and an evaluation of progress towards ‘Ready to Operate’ status can be easily made.
EPC Contractors – 5 different scopes with some common deliverables

- Project A
- Project B
- Project C
- Project D
- Project E

OR&A Solution

ACTOR
ORDITA
Lessons Learned
LLS
FIRST
ORRAT
OR&A Structure

OR&A Manpower Chart

Client OR&A Manager

OR&A Manager

Project A
- Main Processing Units
  - OR&A Lead
  - OR&A Discipline Engineer (3)
  - Flawless Co-ordinator*
  - Flawless Lead**
  - Flawless Team***

Project B
- Tanks
  - OR&A Lead
  - OR&A Discipline Engineer (1)
  - Flawless Co-ordinator**
  - Flawless Team***

Project C
- Offshore Export Facilities
  - OR&A Lead
  - OR&A Discipline Engineer (2)
  - Flawless Co-ordinator**
  - Flawless Team***

Project D
- Utilities & Infrastructure Services
  - OR&A Lead
  - OR&A Discipline Engineer (3)
  - Flawless Co-ordinator**
  - Flawless Team***

Project E
- Supporting Manufacturing
  - OR&A Lead
  - OR&A Discipline Engineer (1)
  - Flawless Co-ordinator**
  - Flawless Team***

---

* Flawless Co-ordinator only required if Flawless Project Initiatives and FIRST system is deployed

** Flawless Lead only required for projects with more complex Flawless Project Initiatives and FIRST system deployed

*** Flawless Team Members are part-time roles (10%) from key positions in each EPC organisation
Lessons Learned

Computerised Lessons Learned Accumulator & Management System (CLLAMS)
ORDITA – Lessons Learned

Computerised Lessons Learned Accumulation & Management System (CLLAMS)

Lesson Source

- Industry PEER Group
- Lessons Learned Workshop
- Corporate Lesson Data
- Harvested from ORA Project

Anonymise

Categorise

Validate

Export

Microsoft Word
Excel
PDF

Sort, Retrieve, Review, Select, & Upload/Export Lessons

Lesson Repository

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ORDITA – Lessons Learned

Options Readiness & Assurance (OR&A) Ltd
Registered in England No.: 06820831

Tools

Lessons Learned

Validated: 283 | Waiting: 1277 | Total: 1560

View Lessons Learned

Sort / Select

283 Lessons Selected

OR&A

Select options

IDEAS

Select options

Sub-Phase

Select options

Origin of Lesson

Select options

Region

Select options

Environment

Select options

Discipline

Select options

Process / Utility System

Check all

Uncheck all

Health, Safety & Environment (HSE)

Regulatory Compliance

Refinery Specific Processes

Steam Generation

Steam Distribution

Eqipment Type

Select options

Q-Area (Flawless)

Select options

Root Cause

Select options

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Lesson No.: 1294
Activity Code: D10203
Title: Incorrect flange bolts installed on process piping
Description: This issue (flow) was identified during a QA inspection of an asset under construction during a pre-commissioning inspection. Incorrect flange bolts were installed which negated the certification of the flanged connection and could easily have resulted in a catastrophic failure of the flanged joint during operation.
The construction team should have been working to a written procedure for the make-up, assembly and tightening of flanged joints which was approved for use by the project and operations team. This could also have been reinforced by the implementation of the Flawless Project Initiative - Tightness G-Area.
All work done specifically by the Project Team during the EXECUTE phase should be regulated to achieve the necessary quality objectives and the necessary quality output requires the adoption and implementation of a robust Quality Management System from the beginning of the EXECUTE phase through to handover of the completed asset to the Operations Team.
The Quality Management System (QMS) processes and procedures must be clearly documented in a QMS Manual and these must be implemented by all parties from the outset.
The QMS will also identify the necessary reports required to document and demonstrate compliance with the quality processes and procedures and the Codes and Standards by which that quality will be measured.
Action: Ensure that the contractor has a written procedure for the assembly and tightening of flanged joints approved for use by the project and operations team. If the make up of flanged connections is considered to be a significant risk, also consider the deployment of the Flawless Project Initiatives (FPI) process, in particular the Tightness G-Area. Ref. D50202.
ORDITA – Lessons Learned

You Have Selected 4 Lessons

Export To Project

Select Project

Title: OR&L Demonstrator - with reports enabled

Selected Lessons

- Incorrect Range bolts installed on process piping
- Inadequate Construction Quality Control - Loose bolts on flanged joint
- Skills/Competence during flange makeup and tightening
- Supply Chain Management (SCM) - process improvement

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FIRST

Flaws, Issues & Risks Synthesis Tool
Flaws, Issues, Risks Synthesis Tool (FIRST)

1. Identify Flaws, Risks & Issues
   - Lessons Learned Workshop
   - Flawless Workshop
   - Previous Projects
   - Experience

2. Record
   - Record Flaws, Issues & Risks in FIRST

3. Evaluate
   - Assess Flaws, Issues & Risks and determine possible consequences

4. Rank
   - Rank Flaws, Issues & Risks and set KPI

5. Mitigate & Manage Flaws
   - Identify mitigation (barriers & recovery measures) and manage Flaws, Issues & Risks

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FIRST - Flaws Wave Chart
Flaws, Issues, Risks Synthesis Tool (FIRST)

FIRST Overview Screen

Flaws Register

Flaw Detail & Management

©Copyright OR&A. Ltd 2019
FIRST - Evaluation of Flaws, Issues & Risks

1. GAP

Identify the risk of each Flaw to the project schedule. The appropriate category or level of risk to the project schedule posed by the flaw should be identified.

2. Order of Magnitude

Identify the order of magnitude for the effect of each Flaw on the project schedule in case of uncorrected. Identify the order of magnitude for the effect of each Flaw on the project schedule in case of corrected.

3. Probability and Severity

Estimate the probability of occurrence of the flaw and severity of the effect that the flaw would have in terms of delay to the project schedule. The appropriate category or level of risk to the project schedule posed by the flaw should be identified.

4. Potential Effect on CAPEX

Estimate the cost effect from the identified risk, including multiple effects of one or multiple system or multiple levels of occurrence. The credit risk analysis is completed in this section. Each Flaw and risks are evaluated to prepare a combination of financial and non-financial effects. The credit risk analysis may be related to ICT projects.

Flaw Risks & Q-Area Selection Screen

Flaws Health Check

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The Flaw Record is the key page of FIRST where the data entry, update and monitoring of flaws is achieved. Creating a new Flaw Record requires the user to select a Q-Area from the drop-down menu. A Flaw ID for each flaw is then created by the system.

The user must then enter a title for the Flaw and a description.

When this has been done, the SAVE button can be clicked to enter the Flaw Record on the Flaws Register.

The new flaw can now be evaluated using the ‘EVALUATE FLAW’ button. This process allows the flaw and the subsequent risk factors posed by the flaw to be ranked and added to the Flaws Risk Table.

Active flaws are managed from this page by recording mitigating action and comments.

The Action Log is automatically completed by the system and initiates an ‘overdue’ status if the flaw is not reviewed on a monthly basis.
E-Learning System
The ORDITA system includes an e-Learning system available to all registered users.

The e-Learning program takes users through from an elementary level to accomplished users by following a step-by-step sequence of lesson plans and quizzes.

As the user completes each quiz, confirming progression of learning, the system allows access to the next level.

After completing all of the quizzes in a section, the user is invited to take an exam and gain a certificate from OR&A to demonstrate that achievement.
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# User Account

## My Account

<table>
<thead>
<tr>
<th>Forename</th>
<th>Username</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>David</td>
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<td><img src="Image" alt="points" /></td>
</tr>
<tr>
<td>Powell</td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="mailto:david@or-and-a.com">david@or-and-a.com</a></td>
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## Exam History

<table>
<thead>
<tr>
<th>Exam</th>
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<tbody>
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<td>OR&amp;A Level 1 Examination</td>
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<tr>
<td>OR&amp;A Level 2 Examination</td>
<td>100%</td>
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<tr>
<td>OR&amp;A Level 3 Examination</td>
<td>95%</td>
</tr>
<tr>
<td>OR&amp;A Level 4 Examination</td>
<td>100%</td>
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</table>

## Contributions

<table>
<thead>
<tr>
<th>Note</th>
<th>Type</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creator of e-Learning System and responsible for setting all exam questions and answers</td>
<td>lesson</td>
<td>1</td>
</tr>
<tr>
<td>More than 40 Years relevant experience in Oil &amp; Gas Projects and Operations 15 Years experience in OR&amp;A Time served in Electrical Engineering Time served in Automation &amp; Controls HNC in Multi-Discipline Engineering MSc in Technical Communications NEBOSH Certificate</td>
<td>experience</td>
<td>10</td>
</tr>
<tr>
<td>10 Years relevant experience in Senior/Lead/Manager/Advisor roles in OR&amp;A</td>
<td>practice</td>
<td>10</td>
</tr>
</tbody>
</table>
The OR&A® Solution

- Secure, private ‘Cloud based’ application
- Multiple User
- Multiple Location
- Multiple Project(s)
- Accessible from any internet enabled device
Review & Audit with the OR&A® Solution

- Risk based review/audit process
- Structured & detailed system
  *with over 2,500 audit questions (PSUA)*
- Structure easily tailored to any project management system
- Discrete Audit Leader / Auditor access levels
- Evidence collection using dedicated secure ‘app’
- Accessible from any internet enabled device
The first step in setting up ORRAT for a review or audit is to calibrate the Risk Matrix.

ORRAT can be easily tailored such that it uses the Risk Matrix of the organisation or entity being reviewed or audited.

This means that the review or audit findings are then aligned with the stated risk appetite of the auditee.
Review & Audit with the OR&A® Solution

Set up a Risk Assessment Matrix (RAM) in minutes …

Follow the guidance questions, or add your own, then record audit findings
Review & Audit with the OR&A® Solution

Collect evidence ...

Add Photo, Video, Audio or documentary evidence (& GPS co-ordinates) using the ‘CARE’ mobile app ...

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See the outcome of the review or audit as it develops …

** Audit Leader Only
Review & Audit with the OR&A® Solution

Manage the Audit and Review findings (Audit Leader Only) …

Generate the Review or Audit report automatically

Manage the Review/Audit findings

Generate the Review or Audit findings spreadsheet

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OR&A Solution Tools

Operations Readiness Database & Implementation Tracking Application (ORDITA)
The OR&A process is deployed on a project to manage, monitor and record progress towards the achievement of Readiness to Operate. Using the Operations Readiness Database & Implementation Tracking Application (ORDITA), users can generate a detailed OR&A Plan and also create range of detailed reports. ORDITA is also used to record progress, comments, lessons and Peer advice as the OR&A process is implemented on a Project.

Integrated e-Learning System (ELS)
The Integrated e-Learning System enables users to develop their OR&A skills and competence and to attain certification from OR&A Ltd. Developed with guidance from City & Guilds of London, the OR&A e-Learning system is a comprehensive program that leads an OR&A Practitioner through the entire process of implementing OR&A on a project, from understanding the basic concepts to performing and analysing reviews and audits.

Lessons Learned System (LLS)
The Lessons Learned System comprises an interactive database of fully detailed Lessons Learned which can be searched, sorted and retrieved for use in new or existing projects. Potential lessons can be downloaded from an existing project or entered manually into the system. Once validated, they are available for use and can be exported in a range of formats or can be electronically uploaded to a specific project.

Project to Business (Asset) Transition Tool (P2B)
The Project to Business (Asset) Transition Tool uses the same functionality as ORDITA with some additional ‘widgets’ that allow progress to be recorded against the achievement of project milestones. This allows the progress of the asset through the transition from project activities into an operational business asset to be monitored and managed effectively.

Operations Readiness Review & Audit Tool (ORRAT)
The Review & Audit Tool is hosted on the OR&A Solution Cloud and is a fully functional Risk Based Auditing system. The functionality of the tool minimises the time taken to perform a review or audit effectively and thereby reduces the need for the Project team to be diverted from their core business for any longer than is absolutely necessary. The tool can be tailored for any risk based review or audit, but is currently pre-populated for OR&A Reviews or PSU/ Audits.

Collection of Audit and Review Evidence (CARE)
The ORA CARE mobile app allows audit team members to upload photographic, video and/or audio evidence to the audit/review tool and assign it to the relevant review or audit finding. The mobile app also records the GPS co-ordinates of the device used to record such evidence, both to validate that evidence and to allow a precise location to be provided to the team responsible for implementing any relevant mitigating action.

Flaws, Issues & Risks Synthesis Tool (FIRST)
The Flaws, Issues & Risks Synthesis Tool (FIRST) is hosted on the OR&A Private Managed Cloud. The tool is a bespoke system used to deploy the Flawless Project Initiatives (FPI) process, applying the required robustness and rigidity with minimal effort. Interactive screens enable the user to navigate the system and to record, monitor and manage Flaws, Flaw Records and KPI’s in a consistent and robust manner.

Assurance Comparator Tool for Operations Readiness in Projects (ACTOR)
ACTOR is a feature provided in ORDITA to allow multiple project dashboards to be presented side-by-side on the ORDITA screen. This allows users responsible for multiple projects to compare the performance of projects from a single accessible point. Appropriate user permissions are required to access each project to be compared, so users with access to a single project can only access that project.

Integrated Decommissioning Enabler & Assurance System (IDEAS)
Although it is essentially still in the development stage, the Integrated Decommissioning Enabler & Assurance System (IDEAS) uses the functionality of ORDITA with modified Delivery Maps, Activities and Tasks to allow progress to be recorded against the achievement of the decommissioning process. This system is a ‘one-stop-shop’ for managing the decommissioning process from Late-Life Operations and Planning for Decommissioning, through the decommissioning life cycle and into long term monitoring of the decommissioned asset.

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Thank You

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