



EXCEED

Leading Energy Transformation

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1 PURPOSE

The purpose of this document is to ensure a clear, systematic, and suitably robust approach to establishing, maintaining, and verifying the condition and effectiveness of risk barriers applied throughout all Exceed operations. This will ensure that all hazards and environmental aspects, including those with the potential to compromise well integrity and give rise to major accidents, are identified and risk assessed, allowing the necessary actions to identified and implemented, such that risks are reduced to As Low As Reasonably Practicable (ALARP). This procedure will also help to ensure that the general duty of Exceed as a Well Operator is met for each phase of a well operation.

This Risk Management for Well Operations Procedure sets out the required activities and deliverables for each stage of Exceed managed projects from IDENTIFY to CLOSEOUT and ensures that the commitments made in the Corporate Major Accident Prevention Policy (CMAPP) (EXCEED-PS-CP-004), summary shown in Figure 1, are met.

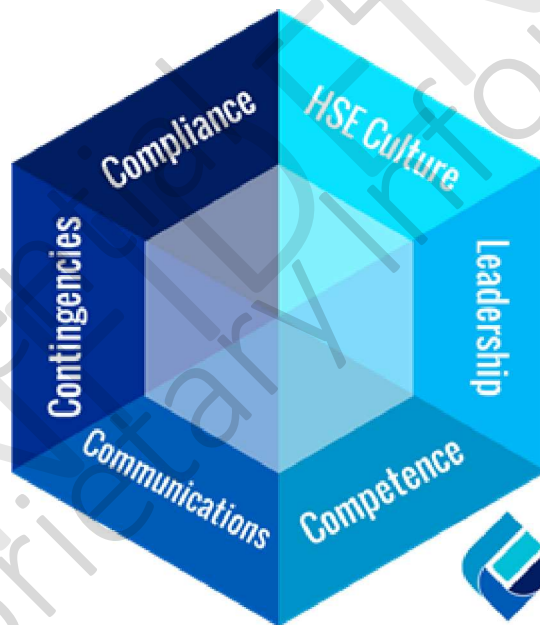


Figure 1: Exceed Energy CMAPP

2 SCOPE

This document is relevant to all projects and operations, using the Exceed Well Execution Process (WEP) Procedure (EXCEED-PRO-WM-001) or the Well Decommissioning Procedure (EXCEED-PRO-WM-005), managed by Exceed Group companies, with the exception of Exceed Norge. The scope of this document includes each stage of operations managed by Exceed, including those where Exceed is appointed the Well Operator.

3 LANGUAGE

Throughout this procedure, the following words have a specific meaning:

- **shall**
A mandatory requirement designed to eliminate or reduce HSE, value or reputational risk.
- **may**
Indicates one possible course of action, left to the discretion of the individual.

4 MANAGEMENT OF CHANGE

Any deviation from the requirements addressed in this procedure shall follow the Exceed Management of Change procedure (EXCEED-PRO-QA-014).

In certain cases where the Client has an existing internal risk management process or similar process, a review or gap analysis of the Client's procedure shall be conducted, documented, and approved by the Exceed Project Manager and Exceed Head of Well Management or delegate.

Under circumstances where preliminary work has been completed for a project prior to Exceed engagement, a review or gap analysis of the completed work shall be performed, to identify the relevant status of the project in relation to the Exceed process. This shall include the activities and deliverables detailed within this procedure and shall be approved by the Exceed Project Manager, the Head of Well Management or delegate, and the Client.

5 ROLES & RESPONSIBILITIES

As an integral part of the Well Engineering Management System, the Wells function is the custodian of this Risk Management for Well Operations procedure, but there are inputs, deliverables and feedback required across several Exceed functions including Project, Contracts, QHSSE and Operations.

- The Exceed Wells Project Manager will
 - Hold overall responsibility for ensuring that the requirements within this procedure are followed for each stage of the project. They shall have the authority to delegate work as they find appropriate.
 - be responsible to ensure that all deliverables in the Project level are completed.
- The Well Operations Superintendent / Senior Engineer will be responsible for ensuring that all deliverables during the Planning stages are completed. Where reference is made to the 'Well Operations Superintendent', this covers Drilling Superintendent, Well Services Superintendent, Completions Superintendent, Abandonment Superintendent. Similarly, where reference is made to 'Senior Engineer', this covers Senior Drilling Engineer, Senior Well Services Engineer, Senior Completion Engineer, Senior Abandonment Engineer.

- The HSE Advisor will be responsible for ensuring that all deliverables at the QHSSE level are completed.
- The Well Operations Superintendent / Wellsite Leader shall be responsible for ensuring that all deliverables at the Operations level are completed.

6 MANAGEMENT OF RISK

6.1 Personal Safety

Exceed recognise the value of providing clear, simple, and consistent information regarding risks in the workplace and the proper use of barriers and safeguards to protect the workforce. Exceed subscribes to the IOGP Life Saving Rules, focusing on simple and life-saving actions that should be carried out in the activities that have been shown to be the most likely to result in fatalities.

Bypassing Safety Controls  Obtain authorisation before overriding or disabling safety controls • I understand and use safety-critical equipment and procedures which apply to my task • I obtain authorisation before: – disabling or overriding safety equipment – deviating from procedures – crossing a barrier	Confined Space  Obtain authorisation before entering a confined space • I confirm energy sources are isolated • I confirm the atmosphere has been tested and is monitored • I check and use my breathing apparatus when required • I confirm there is an attendant standing by • I confirm a rescue plan is in place • I obtain authorisation to enter	Driving  Follow safe driving rules • I always wear a seatbelt • I do not exceed the speed limit, and reduce my speed for road conditions • I do not use phones or operate devices while driving • I am fit, rested and fully alert while driving • I follow journey management requirements
Energy Isolation  Verify isolation and zero energy before work begins • I have identified all energy sources • I confirm that hazardous energy sources have been isolated, locked, and tagged • I have checked there is zero energy and tested for residual or stored energy	Hot Work  Control flammables and ignition sources • I identify and control ignition sources • Before starting any hot work: – I confirm flammable material has been removed or isolated – I obtain authorisation • Before starting hot work in a hazardous area I confirm: – a gas test has been completed – gas will be monitored continually	Line of Fire  Keep yourself and others out of the line of fire • I position myself to avoid: – moving objects – vehicles – pressure releases – dropped objects • I establish and obey barriers and exclusion zones • I take action to secure loose objects and report potential dropped objects
Safe Mechanical Lifting  Plan lifting operations and control the area • I confirm that the equipment and load have been inspected and are fit for purpose • I only operate equipment that I am qualified to use • I establish and obey barriers and exclusion zones • I never walk under a suspended load	Work Authorisation  Work with a valid permit when required • I have confirmed if a permit is required • I am authorised to perform the work • I understand the permit • I have confirmed that hazards are controlled and it is safe to start • I stop and reassess if conditions change	Working at Height  Protect yourself against a fall when working at height • I inspect my fall protection equipment before use • I secure tools and work materials to prevent dropped objects • I tie off 100% to approved anchor points while outside a protected area

Figure 2: IOGP Life Saving Rules

6.2 Behavioural Safety

In order to ensure that personnel consistently exhibit the correct behaviours, Exceed must ensure that they have been provided with the necessary support structure and encouragement. Good safety behaviours require consistent reinforcement and practice, and it is all too easy to inadvertently stop this evolution through inconsistent management action, loss of focus or the sending of mixed messages. Exceed deliver this in line with the nine elements from Step Change in Safety 'Personal Responsibility for Safety'.

Clear Expectations

- Make safety as important as any other personal priority (make it a big deal)
- Ensure you know and understand Exceed's Values
- Ensure you know what is expected of you and your colleagues
- Follow the rules and procedures and encourage colleagues to do the same (doing the job right is more efficient than rushing)
- Ensure that you live up to the safety standards you expect of others
- Communicate what you expect of others and check their understanding of your message
- Help create a culture of safety within your organisation
- Play your part to create a safe and healthy working environment

Effective Communication

- Where possible use face to face communication
- Remember to listen and ask open questions
- Check understanding and, where appropriate, agree actions
- Be sincere and be sure your actions and body language consistently support what you are saying (remember the messages you communicate will be much stronger if you are seen to have a strong personal belief in safety).
- Choose the correct time, place, and media to get the message across

Personal Leadership

- Lead by example, be consistent and follow procedures
- Recognise safe behaviour, give praise, and say thank you where deserved
- Have courage to do the right thing and do not tolerate unsafe behaviour
- Demonstrate personal commitment to safety at work and at home
- Believe that you can make a difference and follow up commitments
- Be enthusiastic, open and take time to interact on safety matters
- Give and welcome feedback
- Even when facing conflicting priorities maintain your safety standards
- Openly share your personal safety commitments

Personal Risk Awareness

- Get involved in discussions about risks associated with the project, questioning anything you do not understand
- Share your experiences with others and encourage them to do the same
- Get involved in workshops and practical work site inspections and always stay aware of your surroundings
- Even when undertaking a routine activity that you believe is safe, always consider the consequences of the worst possible outcomes (personal, family, company, legal etc) and act in a way that reduces the risk
- Practice your observation skills away from the workplace
- Continually assess the potential influence of changes to the operation
- Be aware that alcohol and drugs may impair risk perception

Planning

- When planning, ensure input from all involved, consider any limitations and ensure you have the time and resources to do the job safely and request help where needed
- Take time to fully familiarise yourself with the safety aspects of the agreed scope of work and question any areas that are not completely clear to you
- Understand your interaction with other people involved in the plan
- Where changes to the plan occur, stop work safely and take time to reassess the situation
- Look for improvement opportunities whilst conducting the job and provide feedback for inclusion in future plans

The Right and Duty to Intervene

- Believe you can make a difference and have the courage to challenge unsafe acts
- Lead by example and take action (think about the consequences of turning a blind eye and remember you have a right and moral duty to intervene)
- Welcome interventions from others and accept them in a positive manner
- Intervene in a way which is positive, constructive, and considerate
- Intervene to learn and to praise positive and safe behaviours as well as to challenge unsafe behaviours

Accountability

- Follow the rules, they are there to keep you safe
- Take responsibility and ownership for safety in the environments that you live and work in
- Take action and offer solutions to prevent accidents
- Take time to think about the positive and negative consequences of the actions of yourself and your colleagues
- Have the confidence to stop any job that you believe cannot be completed safely
- Be a positive influence on others and set a good example

Self-Evaluation

- Write down your personal commitments to safety on an annual basis as part of the Exceed appraisal process and share them with colleagues, include
- measurable targets.
- Periodically check how you are doing against your commitments
- Ask for feedback from others who work with you and be prepared to give feedback to others
- Use feedback generated to guide self-improvement

Develop, Encourage and Sustain Safe Behaviours

- Start every day by thinking of how you can keep yourself and others safe and make continuous improvement a personal goal
- Make Risk Recognition a habit, and having identified risks, always implement actions to overcome them
- Consistently do things the safe way at work and at home
- Provide feedback and encouragement on things that work and constructive criticism for things that don't
- Explain why the rules and procedures are there
- Share good practice and intervene to change bad practice.
- Give and act on positive and negative feedback
- Continually look for opportunities to learn from others
- Keep communicating the benefits of sustained safety

6.3 Risk Management

This section of the procedure provides a process for the systematic analysis of risk management throughout all stages of the WEP & WDP. Figure 3 shows the Exceed Risk Management Process, which is in line ISO 31000.

This process is designed to promote dialogue and engagement with all key stakeholders, including the duty holder, involved in the well operation so that they can assist in identifying improvements that can be made in the management of Major Accidents.

How to apply each element to the risk management of wells is described in the following sections. It is the responsibility of the Project Manager to ensure this procedure is followed for each stage of the process.

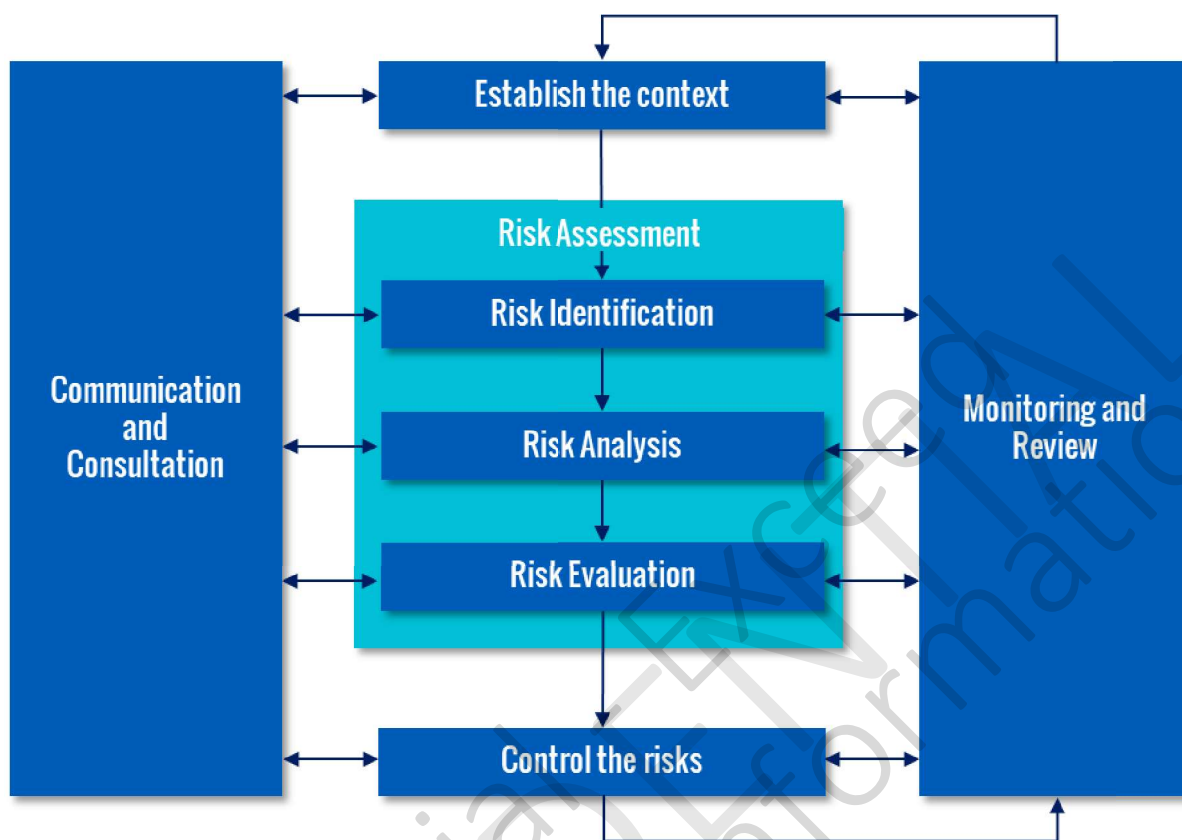


Figure 3: Risk Management Process (ISO 31000)

6.4 Establish the Context, Communication and Consultation

The overall objectives of the well operation, including HSSE objectives, as well as the overall risk criteria should be defined for each stage within the Project CMP and HSE Plan, as appropriate. This allows a consistent and robust means of managing risks, including major accident risk, to be applied across all stages of the process. The following are defined within the Plan:

- Goals and objectives of the well operation and risk management activities.
- Roles and responsibilities within Exceed for the management of major accident hazards.
- The activities to be carried out within each stage of the WEP or WDP as well as the risk assessment methodologies to be adopted.
- The interfaces with external parties (including duty holder and third parties); and
- Defining how process safety performance will be measured.

The Exceed Risk Matrix (**EXCEED-PRO-HSE-005**) shall be used to determine risk criteria and whether at any stage throughout the risk assessment process further risk reduction measures are required.

6.4.1 Project HSE Plan

The Project HSE Plan (**EXCEED-FT-WM-HSE-002**) shall be written and updated as required throughout the WEP or WDP and includes defined risk management objectives, boundaries, scope, and risk criteria. It details Risk Management activities, covered in Section 6 of this procedure, that will be carried out for each

stage of the project to ensure that well operations are managed safely and effectively, clearly highlighting Risk Management roles and responsibilities.

6.4.2 Lessons Learned

Organisational learning is a key aspect of health, safety and environmental management. Applicable lessons learned from previous well operations should be reviewed and shared with all applicable personnel involved in the well operation, including the wider workforce where necessary. This shall be carried out during the Identify Stage HAZID/ENVID – ‘What if’ Analysis and review of the Exceed Master Lessons Learned Database.

6.4.3 Management of Change (MOC)

The Management of change process to be used during each project is documented within the Contract Management Plan (Planning Stages) and the Management System Interface Document / Combined Operations (COMOPS) Bridging Document. By default, the Exceed Management of Change procedure (EXCEED-PRO-QA-014) shall be followed unless documented within the CMP and / or MSID that Exceed is to be interfaced with the duty holder or another party's MOC process, as per the steps described in Section 3.

All changes that have an impact on safety and the environment, including personnel, well integrity, well barrier and well programme changes, shall all be adequately risk assessed by relevant personnel.

6.4.4 Establish Safety Key Performance Indicators (KPIs)

Measuring QHSE including, but not limited to, process safety, performance via Key Performance Indicators (KPIs) provides ongoing assurance that general and major accident risks are being adequately controlled. Early warning of dangerous deterioration within critical systems provides an opportunity to avoid major incidents. The KPIs, including both leading and lagging indicators **shall** be agreed with the client and documented within the Project HSE Plan. This provides an auditable system for measuring and recording the robustness of equipment, procedures, well design, personnel, and safety leadership.

6.4.5 Well Management Organisation

The organisation for management of the well, with a specific view to the management of major accidents, will be defined within the Project HSE Plan. A clear indication shall be given of the required competence of key positions as well as communication lines to effectively manage major accidents. Interface with the duty holder and key third parties should also be defined. Responsibilities and accountabilities of each key function and position shall be defined including, but not limited to:

- Project Manager.
- Senior Engineer
- Well Operations Superintendent.
- Wellsite Leader
- UK Wells Manager
- Head of Decommissioning

- Head of Well Management; and
- QHSSE Manager.

6.5 Risk Identification

Robust risk identification shall identify sources of risk, areas of impacts, events (including changes in circumstances), their causes and their potential consequences

6.5.1 Well Integrity Risks

In addition to well integrity risks influenced by matters such as well formation fluids, there are potential well integrity risks posed by exposure of well barriers to external factors. Risk Identification shall therefore also consider these external factors, including, but not limited to:

- mechanical impacts associated with dropped objects.
- mechanical impacts associated with vessel collision.
- external corrosion.
- fatigue of structural components; and
- any other external major accident scenario outlined within the duty holder's case for safety.

6.5.2 Project Risk Register

A project risk and opportunities register (**EXCEED-FT-WM-WEP-006**) shall be implemented and used to track High Residual Risks and if deemed necessary any Medium Residual Risks (assessed on a case by case basis).

6.6 Risk Analysis

Risk Assessments shall be carried out in accordance with the Exceed Risk Assessment Procedure (**EXCEED-PRO-HSE-004**).

Risk assessments shall be suitable, sufficient and shall include both below-ground hazards as well as other hazards. Should new data be acquired that impacts any assumption or input data, then risk assessments shall be updated.

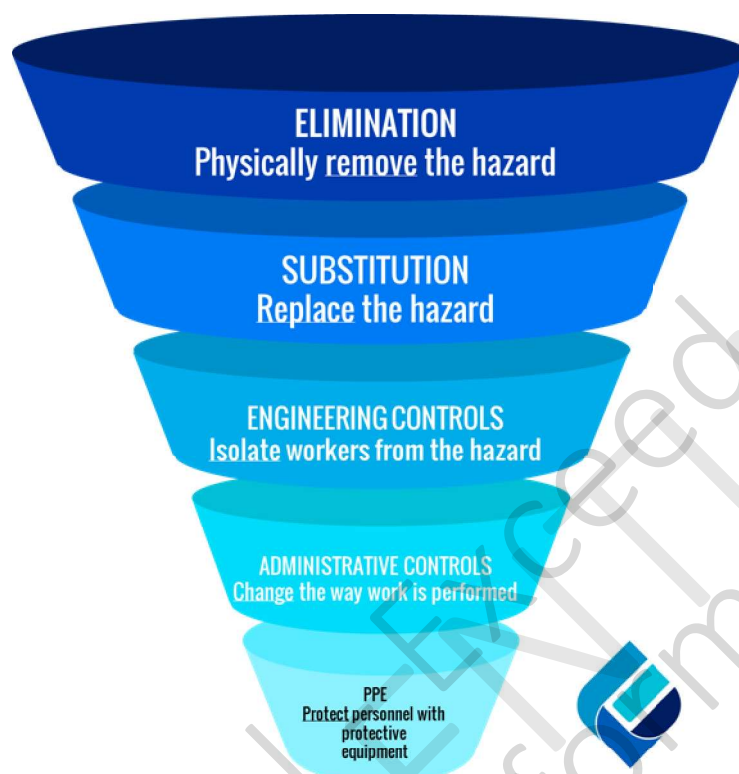


Figure 4: Hierarchy of Controls

6.6.1 Inherently Safer Design (ISD)

Inherently Safe Design (ISD) is a set of general principles that shall be applied throughout each phase of a well operation. It is not a stand-alone deliverable. There should be adequate demonstration in each phase that ISD has been implemented where practicable. The hierarchy of controls shown in Figure 4 above shall be adopted in all well activities carried out and used as a basis in decision making.

6.6.2 Safety Workshop General

The following procedure should be followed for all safety workshops including HAZID/ENVID, Hazard Identification and Risk Assessment (HIRA) and HAZOP.

6.6.2.1 Terms of Reference

A Terms of Reference shall be issued prior to a safety workshop. It shall contain key information such as the date, time and location of the workshop, the objectives, the agenda, the attendees including position and organisation, the methodology to be adopted e.g. guidewords to be used.

6.6.2.2 Risk Assessment Techniques

The Exceed Risk Assessment Procedure (EXCEED-PRO-HSE-004) shall be followed and be used as the basis for risk acceptance.

6.6.2.3 Workshop Reporting

Within an appropriate time of the conclusion of the safety workshops, the full report shall be issued to all attendees. The report shall contain all the information contained within the Terms of Reference as well as the worksheets output and actions from the workshop.

6.6.2.4 Management of Safety Actions

Safety Actions shall be Specific, Measurable, Achievable, Realistic and Time-Based (SMART) All relevant actions shall be documented in the Project Action Tracker, reviewed regularly, and tracked until close out.

6.6.3 Subsurface Risk Assessment

During the SELECT Stage, a risk assessment workshop of the subsurface conditions shall be undertaken to identify and rank the risks from potential well failure-related events.

Once these parameters are established, they are used to reduce the risks of the identified potential well integrity failure related events to as low as reasonably practicable (ALARP).

6.6.4 DEFINE Stage HAZID/ENVID

After initial HAZID/ENVIDs during the IDENTIFY and SELECT Stages, the detailed DEFINE Stage HAZID / ENVID workshop, the main project HAZID/ENVID, is a structured technique to identify all hazards and environmental aspects, relating to operations. It shall be led by an independent chairperson with demonstrable competence in major accident identification. The workshop team should be multidisciplinary and include, where practicable, personnel from operators and key contractors including planning and operational team members and QHSSE. A HAZID/ENVID report shall be prepared and issued by the independent chairperson.

6.6.5 Major Accident Hazard (MAH) Risk Assessment

Major Accident Hazards identified in the HAZID/ENVID shall be risk assessed, during a MAH RA Workshop, attended by Exceed, the Drilling Contractor and the Client. The output from the MAH Risk Assessment shall contain, but not be limited to:

- the Major Accidents identified.
- Initial Risk description (likelihood and consequence) on the Exceed Risk Matrix
- existing safeguards, mitigations, and control measures.
- risk description after application of safeguards (likelihood and consequence) on the Exceed Risk Matrix; and
- details of how the performance of existing safeguards will be assured.

The MAHs shall be recorded in the Project Risk Register, under the Major Accident Hazard category and mitigations tracked on the associated Risk Assessment.

6.6.6 Basis of Design Risk Assessment

During the DEFINE Stage, a risk assessment workshop of the well design shall be undertaken. The Risk Assessment shall identify and rank the risks associated with the well design and ensure all risk barriers and mitigations have been identified to reduce risks to ALARP and tracked through to implementation.

Where identified as required, risks shall be recorded in the Project Risk Register.

6.6.7 Operational Stage Risk Assessment

During the READINESS Stage, an Operational Stage risk assessment workshop shall be undertaken. The risk assessment(s) shall identify and rank the risks associated with the operations stage of the project and

ensure all risk barriers and mitigations have been identified to reduce risks to ALARP and tracked through to implementation.

Where identified as required, risks shall be recorded in the Project Risk Register.

6.6.8 Hazard and Operability (HAZOP) Workshop

A HAZOP is required in the event that equipment is to be used in a different manner than that for which it was previously HAZOP'd or equipment being used together that has not been previously, e.g. for a well test.

A HAZOP may be carried out if required, during the DEFINE Stage. HAZOPs are the application of a structured and systematic, guideword led review, to identify all hazard and operability problems of a well operation. This included causes, consequences, safeguards as well as remedial actions. The chairperson should be of suitable competence and have suitable independence from the well operation.

6.6.9 Layers of Protection Analysis (LOPA)

Should new Safety Instrumented Functions (SIFs) be identified in the HAZOP, a suitable analysis should be carried out in order to demonstrate that they meet suitable tolerable risk levels. This activity is carried out usually several weeks after the HAZOP, after all relevant safety actions arising from that session have been closed.

6.6.10 Failure & Reliability Analysis

Failure & Reliability Analysis should be in place for all producing wells where Exceed is well operator to quantify well integrity risks. Failure Mode Effects and Criticality Assessment (FMECA) is used to establish all types of component failure that may occur and the likelihood of such failures occurring. Design improvements can then be proposed. The frequency of monitoring, surveillance and maintenance required to demonstrate the required reliability, shall be agreed with the client as part of the well design process.

6.7 Risk Evaluation

6.7.1 SIMOPS/COMOPS Workshop

The purpose of this activity is to identify all activities that have the potential to impact other operations being carried out. The output of this workshop is generally a SIMOPS Matrix, listing all key activities and whether they can go ahead simultaneously without any additional controls (green), cannot occur simultaneously (red) or can proceed simultaneously but with additional controls (amber). Note, those marked amber should have the explicit control defined.

If required, the SIMOPS Matrix shall be included within the project's MSID / COMOPS Bridging Document.

6.7.2 Evacuation, Escape and Rescue (EER) & Temporary Refuge (TR) Analysis

If the Hazard Identification and risk assessment has identified events with the potential to cause a major accident, then an EERA shall be carried out. If an EERA already exists, i.e., within the Drilling Unit/Vessel's Safety Case, it shall be reviewed by the HSE Advisor to ensure that an adequate emergency response can be provided.

This normally already exists within the duty holder safety case but should be tested under the operating conditions of and surrounding of the well.

6.7.3 Quantitative Risk Assessment

The probability and consequence of all risks to the loss of well integrity shall be quantified. This normally already exists within the duty holder safety case but should be tested under the operating conditions of and surrounding of the well.

6.7.4 Human Factors

Human factors refer to environmental, organisational and job factors, and human and individual characteristics, which influence behaviour at work in a way which can affect health and safety. It shall be demonstrated that adequate consideration has been given to the current phase of well operation such that it is tolerant to human error and must consider the job, the individual and the organisation.

The following should therefore be identified:

- Sources of potential human error that could cause or contribute to a major accident.
- Factors that make errors more likely. For example, poor design, distraction, time-pressure, high workload; and
- Reduce sources of error as far as is reasonably practicable be redesigning the task or equipment, or implement further control measures such as redundancy, revising procedures or increasing training.

6.8 Controlling the Risks

6.8.1 Risk Controls

All risk controls identified within the Project Risk Register that are to be completed prior to operations must be complete and closed out within the Project Risk Register prior to moving from the READINESS Stage to the OPERATE Stage.

All risk controls that are active during the OPERATE Stage shall be monitored throughout operations to ensure that they are being implemented. During the CLOSE-OUT Stage, these risk controls shall be reviewed and closed out in the Project Risk Register as complete.

6.8.2 Demonstration of ALARP

For key MAH risk management deliverables, a demonstration that risks have been reduced to ALARP shall be carried out. This should include details of further risk reduction measures considered but not implemented.

6.9 Competence Assurance

Competence of Exceed personnel and “direct hire” contractors shall be assured through compliance with the Exceed Competence Assessment Procedure (EXCEED-PRO-HR-005).

The competency management process and crew competence of the Drilling Unit/Vessel shall be assessed and assured in accordance with the Exceed Drilling Unit Selection and Intake Procedure (**EXCEED-PRO-WM-006**).

The competency management processes and competency of personnel of 3rd party service providers shall be assessed and assured in accordance with the Exceed Procurement Management procedure (**EXCEED-PRO-QA-016**). Additionally, those 3rd party service providers deemed to have a safety critical role in operations shall be subject to a competency system audit, and all personnel assigned to the project will have their competency reviewed prior to acceptance by Exceed.

6.10 Applicable Regulations and Standards

The regulations and standards applicable to each project shall be identified during the IDENTIFY Stage and documented within the Project HSE Plan and Well Design Standard Document.

To ensure Risk Management activities are in compliance with local requirements, following completion of the regulations and standards review, the mechanism for managing all regulatory notifications is via a Permits, Licenses, Authorisations, Notifications and Consents (PLANC) Register. A PLANC register shall be prepared during the IDENTIFY Stage and updated as required as the project progresses through the process.

6.11 Applicable Codes and Standards

The codes and standards that are the overarching basis for the well operation shall be documented in the Well Design Standards Document. Examples include ISO standards, company standards or other engineering standards.

6.12 Safety and Environmental Management System (SEMS) Interface

The standards of health and safety by any one party (duty holder or well operator) involved in a well operation shall not be compromised by other parties. It is therefore necessary to review interfacing and integration arrangements of the SEMS from each party. Should Exceed be required to use any element of another party's SEMS, it shall be confirmed that the standard of safety has not been compromised and that, if required, remedial steps are documented. Such steps include, but should not be limited to, counter signatures at key stages, duplication of risk assessments or development of a new integrated process. SEMS interface will be carried out in line with Step Change in Safety H&S Management Interfacing Guidance.

Bridging arrangements shall be documented within the project Management System Interface Document (MSID) or COMOPS Bridging Document, as appropriate. The completed SEMS Review Checklist shall be included as an Appendix in these documents.

6.13 Arrangements for Third Parties

Arrangements for specification and verification of the quality and reliability of systems and equipment that form part of a well barrier system, and therefore SECE, shall be defined within the Project Quality Assurance Plan (**EXCEED-FT-WM-WEP-008**), which shall also contain details of applicable contracting arrangements.

6.14 Monitoring and Review

Monitoring and review are a planned part of each phase of a well operation. It informs of process safety performance and allows lessons learned from such reviews to be implemented. The HSE Plan-Do-Check-Act principle is a continual feedback loop and is embedded into the Exceed process.



Figure 5: Plan-Do-Check-Act

6.14.1 Audit and Assurance Plans

The arrangements for audit and assurance for each stage of a project shall be documented within the Project HSE Plan and Project Quality Assurance Plan. Such activities may include rig intake audit and key 3rd party service company audits. Well Operators have a duty to satisfy themselves, through effective audit and assurance, that their procedures and processes comply with all relevant legislation.

6.14.2 Emergency Preparedness

In the event of a major accident, emergency response arrangements shall be in place to minimise damage to the environment, as far as possible. Oil spill response shall be governed in accordance with the Incident Management (**EXCEED-PRO-HSE-009**) and Crisis Management (**EXCEED-PRO-HSE-014**), Procedures and the Onshore Oil Pollution Emergency Plan (**EXCEED-PRO-HSE-011**).

All projects shall ensure the Licence Operator has provision of a Tier 2/3 Oil Spill Response contractor and capping device (if appropriate). , With delegated call out responsibility provided to Exceed.

A project specific Emergency Response Plan shall be developed for each project. This plan shall bridge between key parties and allow all Major Accident Scenarios to be identified to be planned for.

6.14.3 Well Design Peer Review

An independent peer review of the well design shall be carried out in accordance with the WEP or WDP. It should be carried out by personnel suitably independent from the specific project team. The objectives of the well design review include:

- Challenge the well integrity aspects of the design/planned operation.
- Review the planned operations.
- Review evidence that risks of the well operation are reduced to ALARP.
- Substantiate the well integrity aspects of well design.
- Challenge all assumptions made; and,
- Review and endorse the well integrity aspects of the planned operation.

All matters raised from the design review should be recorded in the Project Action Tracker. All open actions should be closed prior to the milestone agreed.

6.15 Stage Gate Deliverables

For the deliverables relating to risk management activities throughout the Exceed Stage Gate Processes refer to Well Execution Process (**EXCEED-PRO-WM-001**) and Well Decommissioning Procedure (**EXCEED-PRO-WM-005**).

Some of the risk related deliverables are listed below:

6.15.1 IDENTIFY Stage

Contract Management Plan	Project HSE Plan
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6.15.2 SELECT Stage

Subsurface Risk Assessment	
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6.15.3 DEFINE Stage

HAZID/ENVID Workshop	Project Security Plan (if applicable)
Waste Management Plan	

6.15.4 READINESS Stage

Project Management System Interface Document / COMOPS Interface Document	DWOP / CWOP / TWOP / AWOP / Pre-spud
Project Emergency Response Plans	Oil Spill Contingency Plan
Well Control Bridging Document	Source Control Emergency Plan
Well Operations Risk Assessment	Regulatory Commitments Register

6.15.5 OPERATE Stage

Regulatory Commitments Register	HSE Reporting
SIMEX	ER Comms Check

6.15.6 CLOSE-OUT Stage

HSSE End of Well Report	ESIA/Permitting Compliance Report
Lessons Learned Close Out	

7 REFERENCES

7.1 Internal

- EXCEED-PS-CP-004 Corporate Major Accident Prevention Policy (CMAPP)
- EXCEED-PRO-WM-001 Well Execution Process (WEP)
- EXCEED-PRO-WM-005 Well Decommissioning Procedure
- EXCEED-PRO-WM-006 Drilling Unit/Vessel Selection and Intake Procedure
- EXCEED-PRO-HSE-003 Security, Travel and Journey Management Procedure
- EXCEED-PRO-HSE-004 Risk Assessment Procedure
- EXCEED-PRO-HSE-005 Risk Matrix
- EXCEED-PRO-HSE-009 Incident Management Procedure
- EXCEED-PRO-HSE-011 Onshore Oil Pollution Emergency Plan
- EXCEED-PRO-HSE-014 Crisis Management Procedure
- EXCEED-PRO-QA-014 Management of Change Procedure
- EXCEED-PRO-QA-016 Procurement Management Procedure
- EXCEED-PRO-HR-005 Competence Assessment Procedure
- EXCEED-FT-WM-DR-014 Relief Well Complexity Assessment Sheet
- EXCEED-FT-WM-WEP-006 Risk and Opportunities Register
- EXCEED-FT-WM-WEP-008 Project Quality Assurance Plan
- EXCEED-FT-WM-WEP-017 Lessons Learned Review Sheet
- EXCEED-FT-WM-HSE-002 Project HSE Plan
- EXCEED-FT-WM-HSE-010 PLANC Register

7.2 External

- Risk Management – Principles and guidelines (ISO 3100:2009);
- Major Accident hazard management during the design of new installations (ISO 17776:2016);
- Step Change in Safety H&S Management Interfacing Guidance
- Requirements and guidelines for emergency response (ISO 15544:2000);
- Well Integrity -Part 1: Life cycle governance (ISO 16530-1:2017); and
- Well Integrity -Part 2: Well Integrity for the operational phase (ISO 16530-2:2014)



EXCEED

Leading Energy Transformation

EXCEED-PRO-WM-007 - Risk Management for Well Operations Rev1

Final Audit Report

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