Contents

1.0 Introduction .................................................................................................... 5
   1.1 SIMOPS Definition ......................................................................................... 5
   1.2 Purpose ........................................................................................................ 5
   1.3 Scope .......................................................................................................... 5
   1.4 Objectives .................................................................................................... 5
   1.5 Target Audience ............................................................................................ 5
   1.6 Management System Expectations................................................................... 6
2.0 Roles and Responsibilities ................................................................................. 7
   2.1 Gorgon Production Manager ............................................................................ 7
   2.2 Barrow Island Port Captain – (Marine SIMOPS Manager) .................................... 7
   2.3 Marine SIMOPS Stakeholder Representative ...................................................... 7
   2.4 Barrow Island Marine Communication Operators ............................................... 8
3.0 SIMOPS Guidelines .......................................................................................... 9
   3.1 SIMOPS Work Identification ............................................................................ 9
   3.2 Daily Schedule and SIMOPS (SIMOPS Plan) Requirements ................................. 10
      3.2.1 Daily Schedule and SIMOPS (SIMOPS Plan) Purpose .................................. 10
      3.2.2 Creating the Daily Schedule and SIMOPS ................................................. 10
   3.3 Scheduled SIMOPS and Marine Operations Meeting........................................... 11
      3.3.1 Scheduled SIMOPS Meeting Attendees ..................................................... 12
      3.3.2 Scheduled SIMOPS Meeting Outcomes/Deliverables .................................. 12
4.0 SIMOPS Risk Management and Control of Work .................................................. 13
   4.1 Risk Management ......................................................................................... 13
   4.2 High Risk and Focus Areas in Port Limits ......................................................... 13
   4.3 Permit-To-Work ........................................................................................... 13
      4.3.1 Jetty and Material Offloading Facility (MOF) Operations ............................. 14
   4.4 Control Areas and Zones ............................................................................... 14
5.0 Risk Assessment .............................................................................................. 15
6.0 Roles, Responsibilities and Competencies........................................................... 16
7.0 Measurement and Verification .......................................................................... 17
   7.1 Daily Schedule and SIMOPS Procedure Auditing ............................................. 17
8.0 Continual Improvement ................................................................................... 18
9.0 Acronyms and Abbreviations ............................................................................ 19
10.0 References ...................................................................................................... 20

Tables

Table 4-1: Example Control Areas and Zones ................................................................. 14
Table 6-1: Roles, Responsibilities and Competencies ..................................................... 16
Table 9-1: Acronyms and Abbreviations .................................................................... 19
Table 10-1: References ............................................................................................. 20
Appendices

Appendix A Example Daily Schedule and SIMOPS ...........................................................21
Appendix B Example SIMOPS Drawings .........................................................................23

Appendix Figures

Appendix Figure A-1: Example of the Daily Schedule and SIMOPS page 1.......................21
Appendix Figure A-2: Example of the Daily Schedule and SIMOPS page 2.......................22
Appendix Figure B-1: Example of the MOF SIMOPS Drawing ............................................23
Appendix Figure B-2: Example of the Port of Barrow Island SIMOPS Drawing .................24
This page is intentionally blank.
1.0 Introduction

The Port of Barrow Island Daily Schedule and Simultaneous Operations (SIMOPS) procedure has been developed to enhance the safety and efficiency of marine activities occurring within Barrow Island Port Limits. These procedures are designed to manage potential conflicts, risks or potential hazards by effective planning, communication, and execution of two or more concurrent work activities at or near the same location or work area where there is a potential for injuries to personnel, property damage and adverse environmental impact.

1.1 SIMOPS Definition

SIMOPS is broadly defined as two or more activities performed by different groups that occur at the same time, which due to their proximity or interaction could have an adverse effect on each other.

The focus is to control and coordinate activities managed by different entities such that potential major consequences are avoided.

1.2 Purpose

The purpose of this document is to provide guidance for all parties involved in the planning and execution of marine operations or activities within the Port of Barrow Island. It details how marine activities within the port will be planned, coordinated, communicated and managed in order to ensure the continued safety of workers during the period when these activities are occurring simultaneously.

This document intends to fulfil the ABU Standard requirements for a SIMOPS plan.

1.3 Scope

The focus of this document is predominately on maritime operational activities within the Port of BWI. The specific scope of these operations includes:

- All marine activities within the Port of Barrow Island Port Limits
- All landside activities that may impact the safe conduct of marine activities occurring within Barrow Island Port Limits

IMPORTANT NOTICE – Jetty, MOF and DomGas Pipeline SIMOPS:

This document does not supersede the requirements detailed in “Gorgon Project: SIMOPS Tactical Plan G1-NT-PLNX0001394”. All activities that may impact/interface with operations within the Gorgon Gas Treatment Plant (Including MOF and Jetty and DomGas Pipeline) must comply with this document.

1.4 Objectives

The objective of this document is to:

- Designate the responsible parties and their Roles & Responsibilities
- Clarify communication channels between the various parties.
- Describe the method for Identifying SIMOPS hazards and their appropriate mitigation.

1.5 Target Audience

This document is intended for use by:
• ABU Marine Operations personnel
• Gorgon Production Operations personnel
• Gorgon Maintenance personnel
• ABU SCM personnel
• GFP construction personnel
• WA Oil
• Contractors engaged in work within the Port of Barrow Island
• Government vessels working within the Port of Barrow Island

1.6 Management System Expectations
The following Management System Expectations are associated with this document:
• Safe Operation (OE element 3)
  o OE-03.06 Managing Safe work
2.0 Roles and Responsibilities

2.1 Gorgon Production Manager

The accountability for Duty of Care for SIMOPS resides with the Gorgon Production Manager in the role of PIC on BWI.

2.2 Barrow Island Port Captain – (Marine SIMOPS Manager)

- Responsible for managing and co-ordinating the safe conduct of Simultaneous Operations activities within the Port of Barrow Island
- Implements the management strategy, rules and procedures for the Port of Barrow Island SIMOPS with stakeholder engagement
- Interface with Marine SIMOPS stakeholder representatives conducting operations in the port to ensure marine SIMOPS activities are consistently identified, assessed and mitigated to allow safe and efficient execution
- Provide daily co-ordination (if required) and chair the regular SIMOPS meetings where activities and issues are tabled and decisions are communicated to affected parties
- Interface with Emergency Management (EM) and Security on issues relating to Emergency Response and Mustering. Identify and communicate issues affecting Emergency Response.
- Responsible for provision of the Daily Schedule and SIMOPS plan

2.3 Marine SIMOPS Stakeholder Representative

- Designated representative responsible for coordinating the marine operation or activity with the Marine SIMOPS Manager/Port Captain.
- Provide required input to SIMOPS meeting and daily SIMOPS plan.
- Support the execution of the Port Captains duties in the Representative’s area of responsibility by providing oversight and assurance for the implementation of the SIMOPS plan requirements in that area.
- Responsible for ensuring that the Daily Schedule and SIMOPS plan is communicated to their work teams within the designated area/activity of responsibility.
- Participates in all SIMOPS meetings,

Marine SIMOPS Stakeholders may include, but are not restricted to the following departments:

- Gorgon Foundation Project
- ABU Supply Chain Management
- Gorgon Marine Maintenance
- Emergency Management
- ABU Marine Operations
- WA Oil
- Other port users (government, exploration, etc.)
2.4 Barrow Island Marine Communication Operators

- Responsible for monitoring and aiding the execution of simultaneous operations
- Communicates changes in the SIMOPS plan
- Distributes the Daily Schedule and SIMOPS plan to all Stakeholders
- Primary point of contact for all Barrow Island Port users in the event of an emergency or in the event further clarification or updates of the SIMOPS plan are required.
- Monitors all SIMOPS activities to ensure they are executed in accordance with the Daily Schedule and SIMOPS plan.
3.0 SIMOPS Guidelines

All workers should consider the following process and steps before starting any SIMOPS activity/task:

- **S** - Scrutinise the proposed work (SIMOPS Work Identification).
- **I** - Identify SIMOPS risks.
- **M** - Meet and discuss with all affected parties.
- **O** - Obtain agreement on mitigation methods.
- **P** - Plan the work.
- **S** - Share the plan.

To assist in following the above steps, the Port of Barrow Island conducts regular planning meetings. Stakeholders are required to provide written input of the next 24 hour operations before the end of the business day. The meetings are chaired by the Port Captain and should involve a representative from each of the Marine SIMOPS stakeholders that conduct operations within the Port. In the event of complex or involved situations being identified, the Port Captain will conduct SIMOPS meetings at intervals appropriate to the situation.

3.1 SIMOPS Work Identification

Potential SIMOPS work activities include but are not limited to the following:

- Production Operations (LNG, Condensate and Oil)
- Rig Operations and Rig Moves
- Construction/ Dredging Operations
- Mobilization and Demobilization of Equipment
- Logistics vessels transiting to/from a berth or anchorage within the port
- Anchoring of Vessels (e.g. barge anchor spreads)
- Seismic or Geotechnical Operations
- Derrick Barge Operations
- Aircraft Landing/Take off to or from vessels
- Heavy Lifts
- Emergency and/or Spill Response
- Diving Operations
- Survey Operations
- ROV Operations
- Activities involving two or more contractors/work groups operating in close proximity such that they may impact one another
- Ship-Shore Bunker Operations and transfer of bulk liquids (e.g. MEG/Propane)
3.2 Daily Schedule and SIMOPS (SIMOPS Plan) Requirements

The Port of Barrow Island conducts a review process daily at approximately 1600. Daily meetings must include the Port Captain and Marine Communications Operator and require written input of the next 24 hours operations from all marine stakeholders. Such input is to be transmitted from the stakeholder to the Port Captain and MCO e-mail addresses before 1600 the day prior to the operation/activity taking place. In the event that a complex/high risk scope of work is planned to be conducted, the stakeholders involved in the activities will be required to attend the review process. If the stakeholder representative is unable to attend, a delegate must attend or a dial in conference call may be arranged.

3.2.1 Daily Schedule and SIMOPS (SIMOPS Plan) Purpose

In accordance with SIMOPS Plan requirements detailed in the Chevron U&G SIMOPS Standard, the Daily Schedule and SIMOPS will:

- List and describe all planned and potential activities
- Designate the responsible parties for the various operations being performed
- Establish emergency response awareness and contacts
- Identify hazards and appropriate mitigations (precautions and actions) in accordance with ABU Hazard Analysis Standards
- Clarify preferred means of communication between the various operations.

The purpose of the Daily Schedule and SIMOPS meetings is as follows:

- Be a focal point for daily SIMOPS issues and communication.
- Review SIMOPS controls and mitigation plans for the upcoming 24 hours.
- Look ahead at shipping schedule for next 72 hours
- Resolve conflicts and issues.
- Review new activity requests.

3.2.2 Creating the Daily Schedule and SIMOPS

Once all work has been scrutinised, SIMOPS works identified and mitigations put in place, the SIMOPS plan is drafted in the form of the “Daily Schedule and SIMOPS” document by the Marine Communications Operator. “Gorgon Construction Operations – Port Operations – Daily Schedule and SIMOPS Work Instruction GOR-COP-0744” details how this document is to be created.

When drafted, the plan is reviewed and approved by the Port Captain then distributed by the MCO to all departments involved with operations within the Port of Barrow including vessel Masters and operators. The Daily Schedule and SIMOPS (DSS) is published between 1600 and 1900 on the day prior to the forecasted activities.

IMPORTANT NOTICE:

Each Stakeholder Representative remains responsible and accountable for ensuring that all work carried out under their control or influence are maintained IAW this SIMOPS plan once disseminated as per the requirements detailed in 3.2.2 of GOR-COP-0743
Communication between the “Marine SIMOPS Stakeholder Representative” ref 2.3 and the Marine SIMOPS Manager will occur at least every 24 hours. Once the SIMOPS Plan has been approved and the SIMOPS activities have commenced, changes cannot be made to the plan without final approval of the Port Captain.

CAUTION:
Any changes to the Daily Schedule and SIMOPS must be communicated and acknowledged by the work groups affected by the change. Alterations may be communicated by the MCO verbally by VHF ch 10 and or via email. Any significant changes that might affect large work groups or a number of separate work groups is to be communicated via a written change to the DSS and verbally to the stakeholder representatives.

Additional information in the DSS includes:
- The security status of the Port as per MTOFSA,
- The port operating status in relation to forecasted weather events including gale and cyclone warnings,
- Tidal information links to BoM and forecasted tidal stream information,
- Emergency contact information for the Port of Barrow Island as well a link to the Port Website,
- The Port of Barrow Island marine notices in force.

IMPORTANT NOTICE:
Each Stakeholder Representative remains responsible and accountable for ensuring that all work teams under their control or influence have a copy of the Daily Schedule and SIMOPS prior to conducting their activities.

3.3 Scheduled SIMOPS and Marine Operations Meeting
The purpose of the fortnightly meeting is primarily to establish good working relationships and resolve any potential conflicts during the forecasted planning phase between all the stakeholders engaged in operations within the Port of Barrow Island. The meeting aims to highlight activities that are occurring within the Port over the upcoming month. Agenda items include:
- Marine Operations/SIMOPS Incidents and lessons learnt
- MOF shipping schedule
- Diving activities
- Construction activities
- General/other SIMOPS activities
- Maintenance and inspections (both facility and vessel)
- Exercises and drills
3.3.1 Scheduled SIMOPS Meeting Attendees

Fortnightly meetings are to be chaired by the Port Captain and are to include the following personnel:

- Port Captain (Marine SIMOPS Manager)
- Port Superintendent
- Marine Communications Operator (if available)
- Stakeholder Representatives as appropriate. Some examples are:
  - GFP Marine Logistics
  - ABU SCM
  - GFP Marine Operations and Construction
  - Emergency Management/Emergency Response Team
  - Marine Maintenance Contractor representative

3.3.2 Scheduled SIMOPS Meeting Outcomes/Deliverables

Outcomes and deliverables of the meetings may include:

- Communication of hazards/restrictions via a Marine Notice
- Additional risk assessments
- Identification of work requiring Permits
- Meeting minutes
4.0 **SIMOPS Risk Management and Control of Work**

4.1 **Risk Management**

All work to be conducted within the Port must be conducted with an appropriate level of risk assessment (HAZID, WMS, JHA, Step Back 5x5, permits). Simultaneous operations may occur if the associated risks are identified, assessed and managed to be As Low As Reasonably Practical (ALARP).

4.2 **High Risk and Focus Areas in Port Limits**

A number of areas within Port Limits have inherent additional risk either due to the density of vessel traffic or due to the proximity of potentially hazardous material. If work is planned around these areas, additional controls and mitigations may be required. High risk and focus areas include:

- LNG Jetty Terminal berths (when operational)
- DomGas pipeline
- WA Oil offtake pipeline
- CBM Tanker Mooring
- Materials Offloading Facility (MOF)
- WAPET Landing

4.3 **Permit-To-Work**

Permit-to-work requirements shall be conducted in accordance with the ABU Permit to Work Manual – ABU-COP-0011. This document defines ‘work’ be taken to mean anything other than the normal operation of the plant and therefore even planned maintenance is required to be permitted.

Operators are responsible to ensure that the appropriate PTW system is being followed before commencing the scope of work in question.

For example, work to be conducted around the WA Oil offtake pipeline and CBM Tanker mooring are to be conducted under a WA Oil permit-to work.

**DANGER:**

Any work intending to be conducted within 300m of the DomGas pipeline is to be conducted under an Operations permit to work

**IMPORTANT NOTICE:**

Any work intended to be conducted on board a vessel will be conducted in accordance with the vessels own permit to work system.
4.3.1 Jetty and Material Offloading Facility (MOF) Operations

Activities required to execute product ship loading shall be considered normal plant operations in accordance with ABU Permit to Work Manual – ABU-COP-0011 and will not be subject to the issue of PTW. The following will require a permit to work:

- Activities required to maintain the jetty facilities
- Maintenance activities on infrastructure and equipment around the MOF

4.4 Control Areas and Zones

Marine zones may be utilised by workgroups to assist in managing work areas. An example of the type of restriction that could be enforced via a marine zone is detailed in Table 4-1: Example Control Areas and Zones.

Table 4-1: Example Control Areas and Zones

<table>
<thead>
<tr>
<th>Area/Zone</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed Area</td>
<td>Area is closed to all vessel traffic</td>
</tr>
<tr>
<td>Restricted Area</td>
<td>Area is restricted to specific vessels and or operators</td>
</tr>
<tr>
<td>Exclusion Zone</td>
<td>Vessels are prohibited from entering zone without specific approval from “zone controller”. Often used around dive sites with the zone controller being the dive vessel or dive supervisor</td>
</tr>
<tr>
<td>Reporting Zone</td>
<td>A zone in which calling and reporting is compulsory for all vessels wishing to enter. Often used around dive sites with vessels requiring to call the dive supervisor and or dive vessel.</td>
</tr>
<tr>
<td>Construction Area</td>
<td>Implemented by a Marine notice and used by work groups requiring restrictions of vessel traffic proceeding through their work site. Usually utilised when construction activities are occurring over an extended period of time.</td>
</tr>
<tr>
<td>No wake/wash</td>
<td>Often used around ships conducting high risk moves of equipment to reduce the impact of vessel wash.</td>
</tr>
</tbody>
</table>
5.0 Risk Assessment

The risk assessment utilised to assist in identifying potential hazards, risks and consequences for this document is based on the ABU Marine Operations Phase 5 HES Hazards Register.
6.0 Roles, Responsibilities and Competencies

The following table outlines the roles, responsibilities and competencies associated with this document.

**Table 6-1: Roles, Responsibilities and Competencies**

<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibilities</th>
<th>Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port Captain</td>
<td>• Oversees SIMOPS responsibilities within Barrow Island Port</td>
<td>• ABU - MSW - Simultaneous Operations (SIMOPS) COURSE 3753032</td>
</tr>
<tr>
<td></td>
<td>• Responsible for SIMOPS management and implementation</td>
<td>• Local Port Services Course</td>
</tr>
<tr>
<td>Marine Communications Operator</td>
<td>• Responsible for monitoring the execution of simultaneous operations.</td>
<td>• ABU - MSW - Simultaneous Operations (SIMOPS) COURSE 3753032</td>
</tr>
<tr>
<td></td>
<td>• Communicates changes in the SIMOPS plan</td>
<td>• Local Port Services Course</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Marine radio operators certificate</td>
</tr>
<tr>
<td>Stakeholder Representative</td>
<td>• Support the execution of the Port Captains duties in the Representative’s area of responsibility</td>
<td>• Understand roles and responsibilities in accordance with this procedure</td>
</tr>
<tr>
<td></td>
<td>• Responsible for ensuring that the Daily Schedule and SIMOPS plan is communicated to their work teams</td>
<td></td>
</tr>
</tbody>
</table>
7.0 Measurement and Verification

This procedure shall be designed to comply with CVX Corporate auditing requirements. Reference should be made to the following documents:

- OE-12.01.10 - ABU OE Compliance Assurance Level 3 and 4 Audit Program and Procedure
- OE-12.01.17 - ABU Compliance Assurance Program of Control
- Managing Safe Work U\&G Standardized OE Process 4.0 Measurement and Verification

7.1 Daily Schedule and SIMOPS Procedure Auditing

Audits for this document should be conducted against the approved OE Corporate SIMOPS Standard Gap Assessment.
8.0 Continual Improvement

The owner shall review this procedure to ensure that it remains relevant, accurately reflects best practice and continued development relating to the OE Corporate SIMOPS Standard.

The MSW process must have a Continual Improvement Plan that is based upon any process gaps, non-conformance and improvement opportunities identified. Improvement opportunities must be prioritized, taking into consideration risk, resources and other factors.

Continual improvement plans may be unique documents or may exist within other related documentation, including those related to the annual process reviews and/or assessments.

Additionally, continual improvement plans must be used to assist in building the 3-year OE business plan and a process-specific one-year OE execution plan in accordance with the Management System Process (MSP).

This document is to be reviewed annually by the Port Superintendent or their delegate. The review should be conducted against the approved OE Corporate SIMOPS Standard Gap Assessment and the ABU SIMOPS Standard.
9.0 Acronyms and Abbreviations

Table 9-1 defines the acronyms and abbreviations used in this document.

Table 9-1: Acronyms and Abbreviations

<table>
<thead>
<tr>
<th>Acronym/Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABU</td>
<td>Australasian Business Unit</td>
</tr>
<tr>
<td>BoM</td>
<td>Bureau of Meteorology</td>
</tr>
<tr>
<td>CBM</td>
<td>Conventional Buoy Mooring</td>
</tr>
<tr>
<td>CVX</td>
<td>Chevron</td>
</tr>
<tr>
<td>DOMGAS</td>
<td>Domestic Gas</td>
</tr>
<tr>
<td>DSS</td>
<td>Daily Schedule and SIMOPS</td>
</tr>
<tr>
<td>EM</td>
<td>Emergency Management</td>
</tr>
<tr>
<td>GFP</td>
<td>Gorgon Foundation Project</td>
</tr>
<tr>
<td>IAW</td>
<td>In Accordance With</td>
</tr>
<tr>
<td>MCO</td>
<td>Marine Communications Operator</td>
</tr>
<tr>
<td>MEG</td>
<td>Mono Ethylene Glycol</td>
</tr>
<tr>
<td>MOF</td>
<td>Materials Offloading Facility</td>
</tr>
<tr>
<td>MSW</td>
<td>Managing Safe Work</td>
</tr>
<tr>
<td>MTOFSA</td>
<td>Maritime Transport Offshore Facilities Security Act</td>
</tr>
<tr>
<td>PTW</td>
<td>Permit to Work</td>
</tr>
<tr>
<td>OE</td>
<td>Operational Excellence</td>
</tr>
<tr>
<td>SCM</td>
<td>Supply Chain Management</td>
</tr>
<tr>
<td>SIMOP</td>
<td>Simultaneous Operations</td>
</tr>
<tr>
<td>WA Oil</td>
<td>West Australian Oil</td>
</tr>
<tr>
<td>WMS</td>
<td>Work Method Statement</td>
</tr>
</tbody>
</table>
## 10.0 References

The following documentation is either directly referenced in this document or is a recommended source of background information.

**Table 10-1: References**

<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>Description</th>
<th>Document ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>ABU Simultaneous Operations Standard</td>
<td>03.06.102</td>
</tr>
<tr>
<td>2.</td>
<td>SIMOPS PLAN for Gorgon Project Barrow Island LNG Plant</td>
<td>G1-TE-R-0000-PLN0002</td>
</tr>
<tr>
<td>3.</td>
<td>Gorgon Project SIMOPS Tactical Plan</td>
<td>G1-NT-PLNX0001394</td>
</tr>
<tr>
<td>4.</td>
<td>Gorgon Project SIMOPS Strategy Plan</td>
<td>G1-NT-REPX0005664</td>
</tr>
<tr>
<td>5.</td>
<td>ABU BCP Manual Processes ePTW</td>
<td>G1-NT-REPX0005904</td>
</tr>
<tr>
<td>6.</td>
<td>ABU Stop Work Authority Procedure</td>
<td>OE-03.06.14</td>
</tr>
<tr>
<td>7.</td>
<td>ABU Permit to Work Manual</td>
<td>ABU-COP-0011</td>
</tr>
<tr>
<td>8.</td>
<td>Upstream and Gas - Upstream Marine Standard</td>
<td>3.1</td>
</tr>
<tr>
<td>9.</td>
<td>Managing Safe work (Inc. Permit to work)</td>
<td>OE-03.06</td>
</tr>
<tr>
<td>10.</td>
<td>Gorgon Construction-Port Operations-Daily Schedule and SIMOPS Work Instruction</td>
<td>GOR-COP-0744</td>
</tr>
</tbody>
</table>
Appendix A: Example Daily Schedule and SIMOPS

Appendix Figure A-1: Example of the Daily Schedule and SIMOPS page 1
Appendix Figure A-2: Example of the Daily Schedule and SIMOPS page 2
Appendix B Example SIMOPS Drawings

Appendix Figure B-1: Example of the MOF SIMOPS Drawing
Appendix Figure B-2: Example of the Port of Barrow Island SIMOPS Drawing