



PROJECT PERFORMANCE  
INTERNATIONAL

**EXAMPLE CONCEPT OF USE (CONUSE)  
(EXAMPLE OPERATIONAL CONCEPT DESCRIPTION – OCD)**

**SUBMARINE SEARCH AND RESCUE CAPABILITY (SSRC)**

## FOREWORD

This example Concept of Use (CONUSE), developed by PPI, is a part of PPI's documentation in support of its consulting and training activities with clients.

This document is intended to serve as an example of the nature of a Capability System CONUSE, describing, in overview, who is intended to use a new capability or change to an existing capability, what it is intended they use it for, how it is intended they use the capability, and under what conditions it is intended or expected that they will use the capability. The CONUSE also identifies other stakeholders, together with their interests in the capability. The CONUSE is also known as an Operational Concept Description.

The organisations and intended use information referred to in this document are fictitious.

The Capability System CONUSE is developed using the pre-project CONEMP, together with additional information, as inputs to its development. The Capability System CONUSE informs the capability definition activity early in capability development, is maintained, and serves as an ongoing reference for fitness for purpose of the evolving capability, through the rest of capability definition, acquisition, introduction into service and in-service phases of a capability life cycle.

The Capability System CONUSE is used to contribute to an outcomes focus, as contrasted to a military hardware focus, in the early stages of a programme or project, before decisions are made on the best means of achieving the outcomes.

The Capability System CONUSE provides a reference for interpreting and validating requirements in the Capability System Requirements Specification (CapSyRS). Most importantly, the CONUSE provides an ongoing reference for validating all downstream project work and project work products. This role as a reference for validation (satisfaction of need) continues through the life of the capability.

A CONUSE may range in size from as little as a paragraph in the scope section of a CapSyRS or SyRS, for a very small task or very simple and widely known item, to a size implied by this example Capability System CONUSE.

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# **SUBMARINE SEARCH AND RESCUE CAPABILITY (SSRC)**

## **CONCEPT OF USE (CONUSE)**

### **TABLE OF CONTENTS**

<b>1. SCOPE</b>	<b>1</b>
1.1. Identification	1
1.2. Document Overview and Use	1
<b>2. REFERENCED DOCUMENTS</b>	<b>1</b>
<b>3. DEFINITIONS, ACRONYMS AND ABBREVIATIONS</b>	<b>1</b>
3.1. Definitions	1
3.2. Acronyms	1
3.3. Abbreviations	1
<b>4. OPERATIONS</b>	<b>2</b>
4.1. SSRC Purpose	2
4.2. Intended Users of the SSRC	2
4.3. Intended Uses of the SSRC	3
4.4. Use Scenarios and Descriptions	3
<b>5. MISSION RELATIONSHIPS</b>	<b>3</b>
<b>6. OTHER STAKEHOLDERS AND THEIR INTERESTS</b>	<b>3</b>
<b>ANNEX A USER DEFINITION</b>	
<b>ANNEX B USE DESCRIPTION</b>	
<b>ANNEX C DEFINITION OF ENVIRONMENTS</b>	
<b>ANNEX D MISSION RELATIONSHIPS</b>	
<b>ANNEX E OTHER STAKEHOLDERS AND THEIR INTERESTS</b>	

## 1. SCOPE

### 1.1. Identification

This Capability System Concept of Use (CONUSE) relates to a Submarine Search and Rescue Capability (SSRC) to be put in place by the Royal Botswan Navy. The document describes, in **NON-capability-solution-specific** terms, the purpose of the capability in terms of intended users and their characteristics, specific intended uses, how the SSRC is to be used for each intended use, and the environments - 'physical', procedural and policy – within which the SSRC is intended or expected to be used. This document is prepared from information provided by operational users, in user language, and from information from other stakeholders.

### 1.2. Document Overview and Use

This document is intended during its development to be a discussion document between the Submarine Search and Rescue Capability (SSRC) stakeholders of the Royal Botswan Navy, leading to the consolidated, published view of these stakeholders on the intended users, specific intended uses, how the SSRC is to be used for each intended use, and the environment within which the SSRC is intended or expected to be used.

This Capability System CONUSE is intended to provide the definitive reference for fitness for purpose during development of the SSRC, and subsequently throughout evolution of the capability until disposal.

## 2. REFERENCED DOCUMENTS

*“Submarine Search and Rescue Capability (SSRC) Concept of Employment (CONEMP)”*

*“Capability Requirements Development and Management Framework Lexicon”*

RBN-SOC-045: *“Oberon Class Submarine Operational Doctrine”*

RBN-SOC-087: *“Collins Class Submarine Operational Doctrine”*

SOC-MIS-0076, *“Submarine Operations Command Mission”*, Version 4.1, Royal Botswan Navy, 13 January 2013

## 3. DEFINITIONS, ACRONYMS AND ABBREVIATIONS

### 3.1. Definitions

Refer to *“Capability Requirements Development and Management Framework Lexicon”*

### 3.2. Acronyms

<b>BDIA</b>	Botswan Defence Intelligence Agency
<b>BMoF</b>	Botswan Ministry of Finance
<b>CMF</b>	Capability Management Framework
<b>DISSUB</b>	Distressed Submarine
<b>NOK</b>	Next of Kin
<b>RBN</b>	Royal Botswan Navy
<b>RMF</b>	Requirements Management Framework
<b>SSRC</b>	Submarine Search and Rescue Capability

### 3.3. Abbreviations

<b>DISSUB</b>	Distressed Submarine
<b>SubOpsCom</b>	Submarine Operations Command

## **4. OPERATIONS**

### **4.1. SSRC Purpose**

The SSRC is intended to be used primarily by the RBN Submarine Safety Agency, a part of the Navy Command of the Botswana Defence Force (BDF), for submarine search and rescue purposes, in conjunction with the Oberon Class and Collins Class submarines operated by the RBN Submarine Operations Command (SubOpsCom). The operational concept is that, when an on-board submarine emergency occurs, the SSRC detects the existence of the emergency, establishes the location of the submarine, plans a response based on the nature of the emergency, and implements that response, with the primary objectives of:

- a) sustaining the life of any submariners trapped in the submarine;
- b) releasing trapped submariners without further detrimental impact on their health and well-being;
- c) administering medical care (physical and psychological) to rescued submariners while relocating them to shore;
- d) delivering rescued submariners to the Naval Medical Centre;
- e) recovering from the submarine the bodies of any fatalities;
- f) recovering from the submarine, or destroying, all classified information held on the submarine; and
- g) facilitating the subsequent disposition, for example salvage, of the submarine by SubOpsCom.

### **4.2. Intended Users of the SSRC**

The intended users of the SSRC are:

- a) SubOpsCom;
- b) crew of RBN submarines, who may need rescue and/or care;
- c) crew of allied submarines who may need rescue and/or care;
- d) crew of civil and foreign submarines who may need rescue and/or care, where a decision has been made by Government to render aid;
- e) crew of enemy submarines, where a decision has been made by Government to render aid;
- f) personnel who staff enquiries into submarine incidents;
- g) shore medical staff who take over the care of RBN submarine crew;
- h) incident enquiry personnel; and
- i) Next of Kin (NOK) of RBN submariners who may be trapped, injured or deceased.

Table 6-1 defines, by reference to Annex A, the relevant characteristics of each class of user.

### **4.3. Intended Uses of the SSRC**

The intended uses of the SSRC are:

- a) simultaneous location of up to two disabled RBN submarines;
- b) rescue of crew of a disabled RBN submarine;
- c) removal of fatalities from a disabled RBN submarine;
- d) removal of classified material from a disabled RBN submarine;
- e) life sustainment of crew while in a disabled RBN submarine (as a goal, up to two submarines simultaneously);
- f) administration of care at sea to crew released from a disabled RBN;
- g) support to allied submarine commands;
- h) support to civil and non-allied foreign submarines, where a decision has been made by Government to render aid;
- i) support to enemy submarines, where a decision has been made by Government to render aid;
- j) administration of care to personnel rescued from non-RBN submarines;
- k) provision of advance information to shore care facilities;
- l) provision of information to Government; and
- m) provision of information and support to NOK.

These uses are with respect to RBN submarine operations as described in SOC-MIS-0076, "Submarine Operations Command Mission", Version 4.1, Royal Botswan Navy, 13 January 2013.

The uses of the SSRC are detailed in Table 6-1.

### **4.4. Use Scenarios and Descriptions**

Table 6-1 defines, by reference to Annex B, how the SSRC is intended to be used for each use, for representative scenarios of use, and in what procedural and natural environments (Annex C).

## **5. MISSION RELATIONSHIPS**

The expected frequency of and relationships between the uses at section 4 are described at ANNEX D.

## **6. OTHER STAKEHOLDERS AND THEIR INTERESTS**

Other stakeholders, and the interest of each in the capability system, are summarised at ANNEX E.

	<b>User by Name</b>	<b>User Definition (Annex A)</b>	<b>Use (s) – Short Name</b>	<b>Use Description (ANNEX B)</b>	<b>Environment s (ANNEX C)</b>
1.	SubOpsCom	Annex A-1	U01-Location of DISSUB U02-Rescue of DISSUB crew U03-Removal of Fatalities U04-Removal of Classified Material U05-Life Sustainment of Crew U06-Provision of Care to Crew U07-Response to Incident Investigation U08- Support to Allied Submarine Commands U09-Support to Civil/Foreign Vessels U10-Support to Enemy Submarines U11-Support to Public Relations U12-Provision of Information to Government U13-Provision of Information and Support to NOK	Annex B-01 Annex B-02 Annex B-03 Annex B-04 Annex B-05 Annex B-06 Annex B-07 Annex B-08 Annex B-09 Annex B-10 Annex B-11 Annex B-12 Annex B-13	NE1, PE1 NE2, PE1 NE2, PE1 NE2, PE2 NE2, PE1 NE2, PE1 NE2, PE1 NE2, PE3 NE2, PE4 NE2, PE5 NE3, PE6 NE3, PE6 NE3, PE6
2.	Own Submarine Crew	Annex A-2	U02, U05, U06, U13	-	-
3.	Allied Submarine Crew	Annex A-3	U14-Allied Crew Survival	Annex B-14	NE2
4.	Civil/Foreign Vessels Crew	Annex A-4	U15-Civil/Foreign Crew Survival	Annex B-15	NE2
5.	Enemy Submarine Crew	Annex A-5	U16-Enemy Crew Survival	Annex B-16	NE2
6.	Incident Enquiry Personnel	Annex A-6	U17-Support to Incident Investigation	Annex B-17	NE2, PE7
7.	Shore Medical Staff	Annex A-7	U18-Support to Shore Medical Assessment and Care	Annex B-18	NE4, PE8
8	Government	Annex A-8	U19-Obtaining of Information	Annex B-19	NE2, PE8
9	Next of Kin	Annex A-9	U20-Obtaining of Information	Annex B-20	NE2, PE8

**Table 6-1: Description of Users and Uses of the SSRC**

## ANNEX A USER DEFINITION

1. SubOpsCom	Submarine Operations Command situated at Naval Headquarters in Nemo City and charged with the command and control of all RBN submarine operations.
2. Own Submarine Crew	<p>Crew of the RBN Oberon Class and Collins Class submarines, and the subject of a DISSUB incident. These crew have classifications and characteristics defined by RBN-SOC-045, "Oberon Class Submarine Operational Doctrine", and RBN-SOC-087 "Collins Class Submarine Operational Doctrine" respectively. With respect to injuries and other medical conditions of crew to be rescued and delivered to the Naval Medical Centre, the range includes the following, in decreasing order of probability:</p> <ul style="list-style-type: none"> <li>a) oxygen deprivation;</li> <li>b) burns;</li> <li>c) bone fractures;</li> <li>d) internal organ injuries;</li> <li>e) haemorrhaging.</li> </ul>
3. Allied Submarine Crew	Crew of any allied submarines, and the subject of a DISSUB incident for which the RBN provides support. Details of the classifications and characteristics of these crew as known can be requested from the Botswan Defence Intelligence Agency (BDIA).
4. Civil/Foreign Vessels Crew	<p>Crew of any Botswan civilian vessels or foreign vessels that operate in the operational footprint of the SSRC and for which a SubOpsCom or Government decision is made to render aid. The characteristics of these crew are diverse, ranging from potentially solo sailors to crew of fishing, cargo or tanker vessels, to even pirates operating in commercial sea lanes. Language proficiency is also diverse, with approximate breakdown as follows:</p> <ul style="list-style-type: none"> <li>a) English 46%;</li> <li>b) Mandarin 31%;</li> <li>c) Cantonese 22%;</li> <li>d) Spanish 18%;</li> <li>e) Vietnamese 15%;</li> <li>f) Bahasa Indonesia 14%;</li> <li>g) Malay 14%;</li> <li>h) Arabic 12%;</li> <li>i) Other languages (only): 6%.</li> </ul>



5. Enemy Submarine Crew	Crew of any enemy submarines, and the subject of a DISSUB incident. Details of the classifications and characteristics of these crew as known can be requested from the Botswan Defence Intelligence Agency (BDIA).
6. Incident Enquiry Personnel	Personnel assembled by the RBN legal branch or by the Government to investigate and report on any submarine-related incident for which the SSRC is activated. For Government-sponsored enquiries, incident enquiry personnel will include a high proportion of eminent judges and their legal assistants.
7. Shore Medical Staff	Medical staff in civilian or military hospitals ashore where injured or deceased submariners will be transported after rescue from a DISSUB. Medical staff who will use the SSRC include surgeons, clinicians, nursing staff and hospital administration staff.
8. Government	The Government, especially the Minister of Defence, and Ministerial Staff.
9. Next of Kin	Next of Kin will be mainly immediate family, 93% living in Botswan, 4% living overseas and 3% travelling overseas.

## ANNEX B USE DESCRIPTION

### Summary Description of Uses

U01-Location of RBN DISSUB	<p>This use is the location of a DISSUB after determination by the SSRC of a DISSUB situation, or two successive failures of any RBN submarine to establish scheduled communication with SubOpsCom.</p> <p>The specific process steps and their temporal relations are: TBD</p>
U02-Rescue of RBN DISSUB crew	<p>This use is the rescue of surviving RBN submariners and other personnel on the RBN DISSUB after the DISSUB is located.</p> <p>The specific process steps and their temporal relations are: TBD</p>
U03-Removal of RBN Fatalities	<p>This use is the recovery of deceased RBN submariners and other personnel on the RBN DISSUB submarines after the DISSUB is located.</p> <p>The specific process steps and their temporal relations are: TBD</p>
U04-Removal of Botswan Classified Material	<p>This use is the recovery or destruction of Botswan security-classified material (information or equipment) that may be on board the DISSUB and returning it to SubOpsCom.</p> <p>The specific process steps and their temporal relations are: TBD</p>
U05-Life Sustainment of RBN Crew	<p>This use is the sustainment of life of living crew members and other personnel on an RBN DISSUB prior to rescue, whether or not a rescue is in process, or thought to be possible.</p> <p>The specific process steps and their temporal relations are: TBD</p>
U06-Administration of Care to Crew	<p>This use is the delivery of life-supporting care to surviving RBN submariners and other personnel on the RBN DISSUB after rescue, but before delivery to the Naval Medical Centre.</p> <p>The specific process steps and their temporal relations are: TBD</p>
U07-Response to Incident Investigation	<p>This use is contribution to the response of the RBN to the outcome of an investigation report commissioned by Government or the RBN Legal Branch.</p> <p>The specific process steps and their temporal relations are: TBD</p>

U08- Support to Allied Sub. Commands	<p>This use is support to allied submarines at sea which are the subject of a DISSUB incident, by way of participation in their search and rescue, together with support to their commands by provision of information or advice.</p> <p>The specific process steps and their temporal relations are: TBD</p>
U09-Support to Civil/Foreign Vessels	<p>This use is support to civil/foreign vessels at sea and in need of assistance.</p> <p>The specific process steps and their temporal relations are: TBD</p>
U10-Support to Enemy Submarines	<p>This use is support to enemy submarines at sea which are the subject of a DISSUB incident.</p> <p>The specific process steps and their temporal relations are: TBD</p>
U11-Support to Public Relations	<p>This use is support to public relations in terms of the controlled release of accident-related data to the media, having regard to security.</p> <p>The specific process steps and their temporal relations are: TBD</p>
U12-Provision of Information to Government	<p>This use is the preparation of draft responses to Government on questions relating to submarine safety in general, and to specific incidents, having regard to security.</p> <p>The specific process steps and their temporal relations are: TBD</p>
U13--Provision of Information and Support to NOK	<p>This use is communication with NOK regarding crew members, having regard to security, and provision of information on crew member status to the Human Resources Division of the BDF.</p> <p>The specific process steps and their temporal relations are: TBD</p>
U14-Allied Crew Survival	<p>This use is the obtaining of assistance in the life sustainment, rescue and care of the crew of an Allied DISSUB at sea.</p> <p>The specific process steps and their temporal relations are: TBD</p>

U15-Civil/Foreign Crew Survival	<p>This use is the obtaining of assistance in life sustainment, rescue and care of the occupants of civil Botswan and foreign shipping at sea.</p> <p>The specific process steps and their temporal relations are: TBD</p>
U16-Enemy Crew Survival	<p>This use is the obtaining of assistance in life sustainment, rescue and care of the occupants of enemy DISSUB at sea.</p> <p>The specific process steps and their temporal relations are: TBD</p>
U17-Support to Incident Investigation	<p>This use is the obtaining of accurate, complete information in the investigation of and enquiry into an incident involving a RBN DISSUB.</p> <p>The specific process steps and their temporal relations are: TBD</p>
U18-Shore Assessment and Care	<p>This use is the obtaining of information before, during and after rescue which enables shore medical facilities staff, and especially the Naval Medical Centre, to prepare for their treatment of survivors upon delivery of survivors to shore facilities.</p> <p>The specific process steps and their temporal relations are: TBD</p>
U19-Obtaining of Information (Government)	<p>This use is to obtain information to enable the Government to anticipate questions in Parliament and to prepare responses thereto, prepare public statements, engage in DISSUB-related diplomacy with foreign governments, and make policy decisions in regard to: firstly submarine operations; and secondly, support to Allies, other shipping and enemy in relation to incidents at sea.</p>
U20-Obtaining of Information (NOK)	<p>This use is to obtain information on the safety, health, condition, whereabouts and prognosis for loved ones involved in a DISSUB incident, as crew or as participants in SSRC operations who themselves are exposed to danger.</p>

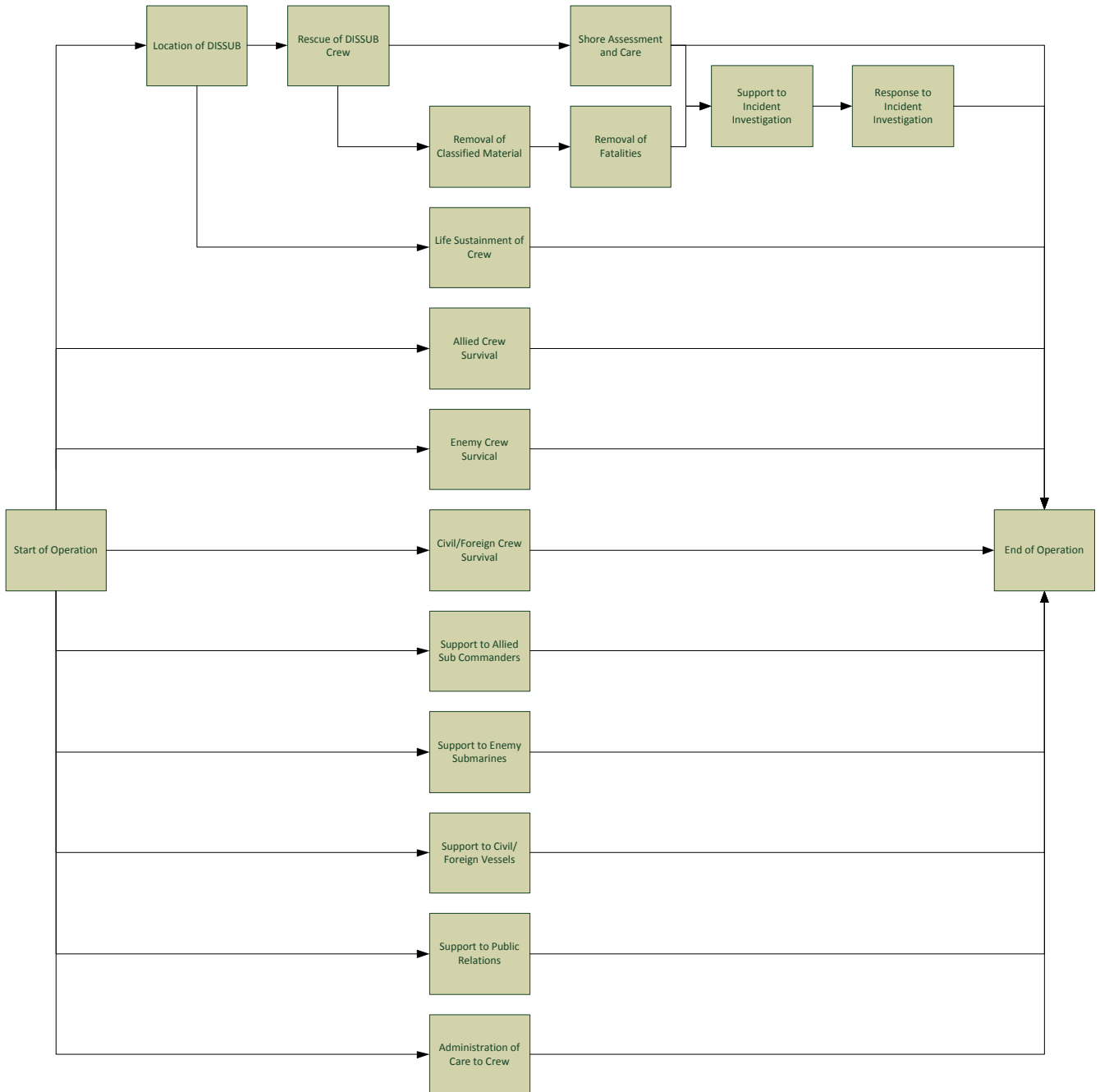
## ANNEX C DEFINITION OF ENVIRONMENTS

NE1	<p>The natural environment within which the totality of SSRC resources are located, as defined by world environmental maps for surface, above surface and sub surface conditions, including temperature, pressure, wind, electrical discharge, rain, hail, snow, solar radiation, sea state, currents, above-surface animals, below surface animals, as applicable.</p> <p>The specific conditions applicable are: TBD</p>
NE2	<p>The natural environment applicable to the area in the vicinity of the DISSUB (above and below water) for the duration of the rescue effort, as defined in SOC-MIS-0076, “<i>Submarine Operations Command Mission</i>”, Version 4.1, Royal Botswan Navy, 13 January 2013.</p>
NE3	<p>The natural environment applicable to the area where public relation interactions will take place, specifically within the climate of Botswan, as published by the Botswan Bureau of Meteorology.</p> <p>The specific conditions applicable are: TBD</p>
NE4	<p>The natural environment applicable to ashore medical facilities to which rescued submariners will be delivered, specifically the climate of Memo City.</p> <p>The specific conditions applicable are: TBD</p>
PE1	<p>The process environment (laws and regulations, policies, procedures and work instructions) pertaining to submarine S&amp;R, including RBN-SOC-045: “Oberon Class Submarine Operational Doctrine” and RBN-SOC-087: “Collins Class Submarine Operational Doctrine”.</p> <p>The specific laws and regulations, policies, procedures and work instructions most applicable are: TBD</p>
PE2	<p>The PE1 process environment, together with the process environment (laws and regulations, policies, procedures and work instructions) pertaining to handling of classified material.</p> <p>The specific laws and regulations, policies, procedures and work instructions most applicable to handling of classified material are: TBD</p>
PE3	<p>The PE1 process environment, together with the process environment (laws and regulations, policies, procedures and work instructions) relating to working with Allies.</p>
PE4	<p>The PE1 process environment, together with the process environment (laws and regulations, policies, procedures and work instructions) pertaining to working with civilian shipping.</p> <p>The specific laws and regulations, policies, procedures and work instructions applicable are: TBD</p>
PE5	<p>The PE1 process environment, together with the process environment (laws and regulations, policies, procedures and work instructions) pertaining to non-combat engagement with the enemy.</p> <p>The specific laws and regulations, policies, procedures and work instructions applicable are: TBD</p>

PE6	<p>The PE1 process environment, together with the process environment (laws and regulations, policies, procedures and work instructions) pertaining to the release of information to the media.</p> <p>The specific laws and regulations, policies, procedures and work instructions applicable are: TBD</p>
PE7	<p>The PE1 process environment, together with the process environment (laws and regulations, policies, procedures and work instructions) pertaining to incident investigation.</p> <p>The specific laws and regulations, policies, procedures and work instructions applicable are: TBD</p>
PE8	<p>The PE1 process environment, together with the process environment (laws and regulations, policies, procedures and work instructions) pertaining to medical care of RBN non-combat and combat personnel.</p> <p>The specific laws and regulations, policies, procedures and work instructions applicable are: TBD</p>

## ANNEX D MISSION RELATIONSHIPS

The temporal relationships of the main SSRC uses are illustrated in Figure D-1. It is improbable that demand for SSRC support would occur in relation to more than one DISSUB incident at a time. However, the possibility exists. The intent in these circumstances is to prioritise the responses, having regard to all the factors, and to direct SSRC resources accordingly. As a minimum, the SSRC is to be able to detect multiple simultaneous RDN DISSUB incidents, and to determine the locations of the submarines.



**Figure D-1: Mission Relationships of a Submarine Search and Rescue Operation**

## ANNEX E OTHER STAKEHOLDERS AND THEIR INTERESTS

Other stakeholders and their interests are summarised in Table E-1.

Stakeholder	Stakeholder Interest
Botswan Department of Finance (BDoF)	BDoF will have an interest in the SSRC as an element of public expenditure requiring funding.
Foreign Intelligence Agents	Foreign intelligence agents can be expected to target SSRC resources for collection of potentially useful intelligence in the forms of humint, sigint and imagery.
Future SSRC Personnel	Future SSRC personnel will use the SSRC to gain employment, contribute to lifestyle, and further career.
News Media	News media are continuously trying to get newsworthy information, overtly and covertly. Once aware that a DISSUB incident is in progress, news media can be expected to use all available means to gather news, then comment on the news, then attempt to lay blame.
Other Navies	Other navies will be interested in the SSRC solution, for what they can learn and use in their own SSRC developments and evolutions.
Politicians	Politicians will have an interest in the SSRC, as a government asset, from many viewpoints associated with their political interests and ambitions.
Potential Suppliers	Some potential suppliers will form a part of the SSRC solution. Potential suppliers, as stakeholders, will be interested in information from which to assess opportunities. They will be interested in influencing SSRC development to their advantage, in winning contracts to supply SSRC-related products and services, and in making money from doing so. Some suppliers will be interested in leveraging SSRC contracts to create products that they can sell to other customers.
Public	The public will have an interest in the SSRC from many viewpoints, including: use of their taxation dollars, potential career opportunities for selves and children, and general curiosity.