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SkillsMalaysia

OCCUPATIONAL STRUCTURE

THE COASTAL MARITIME SURVEILLANCE

OCCUPATIONAL JOB STRUCTURE FOR

The Coastal and Maritime Surveillance

JABATAN PEMBANGUNAN KEMAHIRAN
KEMENTERIAN SUMBER MANUSIA

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ABBREVITIONS

CBRNE	Chemical, Biological, Radiological, Nuclear, Explosive
CPTED	Crime Prevention Through Environmental Design
DACUM	Developing a Curriculum, is an occupational analysis method aimed at the achievement of results that may be immediately applied to the development of training curricula.
GMDSS	Global Maritime Distress Safety System
IALA	International Association of Lighthouse Authorities
IMO	International Maritime Organization
JPK	Jabatan Pembangunan Kemahiran
LRIT	Long Range Identification and Tracking
MOSQF	Malaysian Occupational Skills Qualification Framework
MQF	Malaysia Qualification Framework
MRCC	Maritime Rescue Coordination Centre
MRSC	Maritime Rescue Sub-Centre
NOSS	National Occupational Skills Standard
SDAC	Skill Development Advisory Committee
STRAITREP	The Mandatory Ship Reporting System in the Straits of Malacca and Singapore
SWASLA	Malaysian Sea Surveillance System
TMDA	Total Maritime Domain Awareness
VMS	Vessel Monitoring System

1. EXECUTIVE SUMMARY

Malaysia is divided into two geographical sections with 4,492 kilometer beaches and extensive offshore that are rich with economic resources. The Strait of Malacca known as among the world busiest shipping route is the main shipping channel for traders in the Asian region.

Malaysia's unique and beautiful coastal landscape and seascape attracts continuous tourists' visits. The rapid development of the fisheries industry allows them to become the supplier of seafood products for locals as well as for exports. Its offshore is rich with oil and gas, the vital economic sources and contributors to Malaysia's income, and it is apparent that the Malaysia's sea played an immense role for the country's economic growth.

Despite of the advantages of having beautiful and rich coastlines, there are emerging threats that have to be dealt with swiftly and effectively. Coastal boundary trespassers, piracy activities, smugglings, ships collision, oil spills, waves of Tsunami are some of the threats that we cannot spare but need to be dealt with for the importance of the people and the country.

Constant efforts have been carried out since earlier to safeguard the economy, safety and security of our offshore and coastline. The conventional method of monitoring our offshore previously employed has been redeveloped into today's cutting edge technology using radars, and electronic surveillance systems. Nevertheless, constant efforts must be carried out to educate the public on the profession offered by this field since it is still new. The lack of specific and comprehensive trainings in the technical aspects has stalled the development of professionals involved under this line of work. Currently there are lacks of exposure on information on the career path, challenges and the security of the occupations.

The effort to upgrade the professionalism and to develop the human resources in this field should begin with the development of the skills standard that will be

used as the foundation in developing training programs at the national level. Subsequently the occupational analysis in the Coastal and Maritime Surveillance must be conducted to chart the career path. This analysis will disclose the career succession mapping as well as accurate classification framework. This covers the domain areas of the economy sector, security, safety and law enforcement. It is hoped that profession under this field will be competitive and becoming the choice of employees in the mission to achieve the 2020 vision.

2. CONCEPT AND STRUCTURE OF THE MALAYSIAN OCCUPATIONAL SKILLS QUALIFICATION FRAMEWORK (MOSQF)

The Malaysia Occupational Skills Qualification Framework (MOSQF) is a framework that will be a unified system to bind and interlink all the qualifications awarded in Malaysia. The MOSQF will serve as an instrument that develops and classifies qualifications based on a set of criteria that are approved nationally and is at par with international good practices at the level of learning attained by the learners. This includes learning outcomes achieved and thus clarifying levels of learning. The criteria will be used and accepted by all Department of Skills Development (DSD) accredited centres. The MOSQF is developed based on the Malaysian Qualifications Framework (MQF) and also based on frameworks used and referenced by other countries such as England, Wales & Northern Ireland, Australia, New Zealand and Europe. Therefore the MOSQF will enable it to become a translation device to make qualifications more readable and understandable across different countries. The framework was developed in order to improve the current national training system for all parties of interest such as individuals, skills training providers, the Government, associations, professional bodies, the industry and the Malaysian community.

The MOSQF has defined eight (8) levels of qualifications in four (4) sectors of education. The four (4) sectors of education are the:

- Skills sector;
- Vocational and technical sector;
- Life-long learning sector; and
- Higher education (university) sector.

The eight (8) levels of qualifications can be seen in *Figure 1: MOSQF – Four (4) Highe Education Sectors & Eight (8) Qualifications Levels*.

<table>
<tr><th rowspan="2">QUALIFICATION / LEVELS</th><th colspan="3">SECTORS</th><th rowspan="2">LIFELONG LEARNING</th></tr>
<tr><th>SKILLS</th><th>VOCATIONAL AND TRAINING</th><th>HIGHER EDUCATION</th></tr>
<tr><td>8</td><td>Malaysian Skills Higher Meister</td><td></td><td>Doctoral Degree</td><td rowspan="10">Accreditation for Prior Experiential Learning (APEL)</td></tr>
<tr><td rowspan="2">7</td><td rowspan="2">Malaysian Skills Meister</td><td rowspan="2"></td><td>Master’s Degree</td></tr>
<tr><td>Postgraduate Certificate & Diploma</td></tr>
<tr><td rowspan="2">6</td><td rowspan="2">Malaysian Skills Higher Advanced Diploma</td><td rowspan="2"></td><td>Bachelor’s Degree</td></tr>
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<tr><td>5</td><td>Malaysian Skills Advanced Diploma</td><td>Advanced Diploma</td><td>Advanced Diploma</td></tr>
<tr><td>4</td><td>Malaysian Skills Diploma</td><td>Diploma</td><td>Diploma</td></tr>
<tr><td>3</td><td>Malaysian Skills Certificate 3</td><td rowspan="3">Vocational & Technical Certificate</td><td>Certificate</td></tr>
<tr><td>2</td><td>Malaysian Skills Certificate 2</td><td></td></tr>
<tr><td>1</td><td>Malaysian Skills Certificate 1</td><td></td></tr>
</table>

Figure 1: *MOSQF – Four (4) Higher Education Sectors & Eight (8) Qualifications*
Levels Source: *MOSQ Division, Department of Skills Development*
Date Reviewed: *June 2008*

LEVEL	LEVEL DESCRIPTION
1	Achievement at this level reflects the ability to use relevant knowledge, skills and procedures to complete routine and predictable tasks that include responsibility for completing tasks and procedures subject to direction or guidance.
2	Achievement at this level reflects the ability to select and use relevant knowledge, ideas, skills and procedures to complete well-defined tasks and address straightforward problem. It includes taking responsibility for completing tasks and procedures, and exercising autonomy and judgment subject to overall direction or guidance.
3	Achievement at this level reflects the ability to identify and use relevant understanding, methods and skills to complete task and address problems that are well defined with a measure of complexity. It includes taking responsibility for initiating and completing tasks and procedures as well as exercising autonomy and judgments within limited parameter. It also reflects awareness of different perspectives or approaches within an area of study or work.
4	Achievement at this level reflects the ability to identify and use relevant understanding, methods and skills to address problems that are well defined but complex and non-routine. It includes taking responsibility for overall courses of action as well as exercising autonomy and judgment within fairly broad parameters. It also reflects under-standing of different perspective or approaches within an area of study or work.
5	Achievement at this level reflects the ability to identify and use relevant understanding, methods and skills to address broadly-defined, complex problems. It includes taking responsibility for planning and developing courses of action as well as exercising autonomy and judgment within broad parameters. It also reflects understanding of different perspectives, approaches or schools of thought and the reasoning behind them.

LEVEL	LEVEL DESCRIPTION
6	Achievement at this level reflects the ability to refine and use relevant understanding, methods and skills to address complex problems that have limited definition. It includes taking responsibility for planning and developing courses of action that are able to underpin substantial change or development, as well as exercising broad autonomy and judgment. It also reflects an understanding of different perspectives, approaches of schools of thought and the theories that underpin them.
7	Achievement at this level reflects the ability to reformulate and use relevant understanding, methodologies and approaches to address problematic situations that involve many interacting factors. It includes taking responsibility for planning and developing courses of action that initiate or underpin substantial change or development, as well as exercising broad autonomy and judgment. It also reflects an understanding of theoretical and relevant methodological perspectives, and how they affect their area of study or work.
8	Achievement at this level reflects the ability to develop original understanding and extend an area of knowledge or professional practice. It reflects the ability to address problematic situations that involve many complexes, interacting factors through initiating, designing and undertaking research, development or strategic activities. It involves the exercise of broad autonomy, judgement and leadership in sharing responsibility for the development of a field of work or knowledge, or for creating substantial professional or organisational change. It also reflects a critical understanding of relevant theoretical and methodological perspectives and how they affect the field of knowledge or work.

Figure 2: *Malaysia Occupational Skills Qualification Framework (MOSQF) Levels*

Description Source: *MOSQ Division, Department of Skills Development*

Date Reviewed: *2 April 2008*

3. BACKGROUND OF THE COASTAL & MARITIME SURVEILLANCE SECTOR

3.1 Preamble

Occupations in the Coastal and Maritime Surveillance field have long been existed in Malaysian industries. This range of activity has developed from using traditional method to using the state of the art technology of today. It is apparent by way of employing the high-tech tracking down radar and other types of systems have exhibited the dynamism of this field.

From the economic, social, security and defence view, this area of interest is important to Malaysia especially when its borders are surrounded by the sea.

Unlike other popular occupations, the professions under this field are very vague and additionally the public has no or little knowledge about this specialty as they are not widely exposed to the information even though this field is not new. This has been worsened by variations of job titles within this industry.

No doubt that there are law provisions for most of the coastal activities, but Coastal and Maritime Surveillance, which is viewed as the support function uses only guidelines provided by the International Body.

The incidences such as ships accidents, oil spills, boarder intrusions, natural disaster and piracy activities happens along the national coastal line have been identified as threats that need to be addressed effectively.

The offshore that are rich with economic resources have economic activities that contribute to the country's income. Oil and gas, fisheries and tourism industries are the biggest contributors to the Malaysia's income growth.

Issues on coastal and maritime safety and economic areas have becoming more complex which have urged concerned people related to this area to prepare the service for the coastal & maritime surveillance in order to manage the current needs.

Efforts to increase the efficiency and the development of professionalism in this field should not be delayed. The development of the career path and standard practices need to be established and be used as the basis for developing the training curriculum acceptable by the industry. It should begin with occupational analysis followed by the development of the National Occupational Skills Standard (NOSS).This process enables all interested parties in the industries to review and update the current practices in order to put these professions to become more competitive in line with other top professions.

This career strengthening method implementation will witness a lot more potential students and graduates entering into this field are inspired. The current employees who are already in the service will make out their career directions and taking opportunity to improve their work quality through attending the more structured skills programs. This is an important move that cannot be delayed since requirements for professions in the field are estimated to be doubled within these five years. This effort will increase the total population of highly skilled employees with high incomes is desired by the country.

3.2 Definition of Coastal and Maritime Surveillance

Coastal and Maritime Surveillance refers to the process of monitoring the behaviour of targeted peoples, objects, situations or processes for conformity to expected or desired norms in trusted systems for economics, security, safety and social control in respective coastal

and maritime areas. Generally the objective of coastal and maritime surveillance is to reach a level of situation awareness which allows the timely detection and prevention of events which threatens the maritime security, safety and environment.

This surveillance technology has the capability to facilitate users by land, sea and air. For the purpose of this occupational analysis, follow up from the monitoring activities such as physical control, interception, and boatswain, exile, prosecution and any other post surveillance actions are not included in these definitions.

The Coastal and Maritime Surveillance is also covers the undersea activities such as observing the changes in the vessel route seabed levels, human activities, movement of submarines etc. However, when the undersea surveillance activities are concerned, high concentration given on the changes in the seabed level along the vessel route conducted at the ports. Other undersea activities from the similar group may be added whenever need arises.

3.3 Current Coastal and Maritime Surveillance Analysis

Currently, coastal and maritime surveillance services are used heavily in the military, defence-based industries, fisheries, oil and gas industry, sports, maritime enforcement agencies, marine police, marine department, department of environment and other small industries.

Surveillance technology is often used to clarify long distance observation using electronic equipments and other methods such as:

Eavesdropping
Telephone tapping
Directional microphones
Minox subminiature cameras

Night vision
GPS tracking
Multilateration
Bait car
Electronic tagging
CCTV Images
Maritime Vessel Traffic Control (ATC) Radars
Military reconnaissance
“trusted” computing devices
Internet and computer surveillance

Nevertheless, surveillance may also involve low-tech method such as direct observation using long range lenses, interception or other similar methods.

3.3.1 Impact of surveillance

Modern surveillance methods cannot be fully avoided. Nonetheless, for small assignments, simple methods of surveillance are still suitable. The usage of these simple methods can be effective if done properly.

Efforts to use surveillance on humans are, in general, still limited by the laws. Justifications for surveillance are critical in such matters.

In most types of surveillance, the issue of shape and form is very important. Even though an isolated information may seem meaningless, when it is interconnected to other relevant data that have been gathered, it may yield useful information. This may involve information on relatedness and patterns of work as well as personal habits. Data gathering and processing can be done automatically using computers.

3.3.2 Surveillance devices or bugs

Bugs are not really a tool of communication but they absolutely

require communication lines. Bugs often involve radio transmitter. However, there are many other options that can function to transmit signals. You may send radio frequency through building main wire lines and receive the signal outside. You may receive calls from wireless telephones and you may also receive data from a computer network.

Bugs are obtainable in various sizes and shapes. The original use of bugs is to broadcast sound. Tremendous advancement in miniaturisation of electronic devices today have enabled television images to be transmitted through bugs that are connected to a small video camera. The costs of having these devices have decreased.

Newest practices seem to be the development of surveillance equipment or bugs that are combined with popular electronic devices. For example, new surveillance system gadgets involve inserting a recording device and camera as well as a communication tool into a laptop. A surveillance agent would pretend to listen to something on the laptop while sitting close to a target to record the target's conversation. The control centre would give direction to the agent through the laptop.

3.3.3 Computer surveillance

At the basic level, computer is a surveillance target due to its nature that a lot of personal information that it usually contains. Anyone who could get access to or move the computer can log in to it. If someone could install the related software into a computer, he can also transform the computer into a surveillance device.

Computers may be hacked through many ways, from inserting physical bugs or software to intercepting radio broadcast that is transmitted by normal computer operation.

3.3.4 Photography

Photography has become more valuable as a surveillance method. In recent years, there has been clear development in the application of still photography and video. At the same time, there has been progress in the usage of close circuit television technology and computer imaging processes that enable digital images to be taken from the camera and adapted or compared to images saved in data banks.

Photographs have long been accepted as a form of evidence. Nonetheless, images are gathered not just as evidence in court but also as a source of espionage information. Photo-taking and video also have another effect – they scare the general public.

3.3.5 Closed-circuit television

Closed-circuit television (CCTV) — with which the picture is viewed or recorded, but not broadcast — initially developed as a means of security for banks. Today it has developed to the point where it is simple and inexpensive enough to be used in home security systems, and for everyday surveillance.

The widespread use of CCTV by the police and governments has developed over the last 10 years. In big cities and towns across the country, government has installed large numbers of cameras linked to police authorities. The justification for the growth of CCTV in towns is that it deters crime — although there is still no clear evidence that CCTV reduces crime. The recent growth of CCTV in housing areas also raises serious issues about the extent to which CCTV is being used as a social control measure rather than simply a deterrent to crime.

The development of CCTV in public areas, linked to computer

databases of people's pictures and identity, has been argued by some to present a risk to civil liberties.

3.3.6 Electronic trails

Modern society creates large amounts of transaction data. In the past this data would be documented in paper records and would leave a "paper trail" but today many of these records are electronic, resulting in an "electronic trail" that is easily reconstructed through automated means. Every time you use a bank machine, pay by credit card, use a phone card, make a call from home, or otherwise complete a recorded transaction you generate an electronic record. When aggregated and analyzed, this information can identify individual behaviour patterns that describe how you live and work.

One way to protect autonomy and individual freedom in a paper-based world is through anonymous transactions, for example by using cash. When transactions are electronic, that anonymity may be lost.

Today, large aggregations of transaction information are assembled by marketing, credit reporting, and other data aggregation companies in order to analyze consumer behaviour to determine how companies should manage their marketing or sales strategies, or to assess counterparty "trust" for financial transaction. These data sets are also sold to other companies or to government agencies for additional use.

The availability of large data sets of transaction information facilitates the use of automated surveillance or analysis techniques such as data mining to perform data surveillance.

3.3.7 Data profiling of individuals

Data profiling in this context is the process of assembling information about a particular individual in order to generate a profile — that is, a picture of their patterns and behaviour (compare this use of the term data profiling with that used in statistics or data management where data profiling is the examination of information describing the data or data set itself).

Data profiling is used in security, law enforcement and intelligence operations for a variety of applications — for example, to assess "trust" for security clearances or to grant authorisation relating to a trusted system, or to identify or apprehend suspects or threats. The government is able to access information from third parties — for example, banks, credit companies or employers, etc — by requesting access informally, by compelling access through the use of subpoenas or other procedures, or by purchasing data from commercial data aggregators or data brokers. Under United States v. Miller (1976), data held by third parties is generally not subject to Fourth Amendment warrant requirements. Private companies and private investigators can also generally access or purchase data from these aggregators.

Information relating to any individual transaction is easily available because it is not generally highly valued in isolation, however, when many such transactions are aggregated they can be used to assemble a detailed profile revealing the actions, habits and preferences of the individual.

In the past, much information about individuals has been protected by practical obscurity (a term used by Justice Stevens in his opinion in USDOJ v. Reporters Committee, 1989). Practical obscurity refers to the practical difficulty of aggregating or analyzing a large number of data points in different physical

locations. In addition, information was often transient and not easily available after the fact. Further, even where data was available, correlation of paper-based records was a laborious process. Electronic, particularly digital, record-keeping has undermined this practical obscurity by making data easily available and potentially making aggregation and analysis possible at significantly lower costs.

Thus, as more information becomes available in electronic form — for example, as public records such birth, court, tax and other records are made available online — the ability to create very detailed data profiles increases and may raise concerns.

3.3.8 Natural surveillance

Natural surveillance is a term used in "Crime Prevention Through Environmental Design" (CPTED) and "Defensible Space" models for crime prevention. These models rely on the ability to influence offender decisions preceding criminal acts. Research into criminal behaviour demonstrates that the decision to offend or not to offend is more influenced by cues to the perceived risk of being caught than by cues to reward or ease of entry. Consistent with this research CPTED based strategies emphasise enhancing the perceived risk of detection and apprehension.

Natural surveillance limits the opportunity for crime by taking steps to increase the perception that people can be seen. Natural surveillance occurs by designing the placement of physical features, activities and people in such a way as to maximize visibility and foster positive social interaction. Potential offenders feel increased scrutiny and limitations on their escape routes. It is typically free of cost however its effectiveness to deter crime varies with the individual offender.

Included in the design are features that maximise visibility of people, parking areas and building entrances: doors and windows that look out on to streets and parking areas, see-through barriers (glass brick walls, picket fences), pedestrian-friendly sidewalks and streets, and front porches. Designing night-time lighting is particularly important: uniform high intensity "carpet" lighting of large areas is discouraged, especially where lights glare into (and discourage) observer's eyes. In its place is feature lighting that draws the observer's focus to access control points and potential hiding areas. Area lighting is still used, but with shielded and cut-off luminaries to control glare. Light sources are typically placed lower to the ground, at a higher density, and with lower intensity than the lighting it is designed to replace.

Any architectural design that enhances the chance that a potential offender will be, or might be, seen is a form of natural surveillance. Often, it is not just the fact that the offender might be seen that matters.

4.0 GENERAL OVERVIEW OF THE INDUSTRY

The coastal and maritime functions have existed in various public and private sectors since long before. However it is not classified under any specific area since this function considered more vital as the support function to other activities. The function is employed in the armed forces, sea department, maritime law enforcement, harbors, fisheries industries, oil and gas and some other small industries. Safeguarding the coastal not only significant to the safety of the country, but imperative for gaining the trust of international society.

The intrusion of illegal immigrants, foreign fishermen, piracy activities, sea pollution and so forth have intensified the need for Malaysia to have more structured and effective enforcement and maritime surveillance system. The demand has generated Malaysia Maritime Enforcement Act 2004. This is

followed by the incorporation of Malaysia Maritime Enforcement Agency that has been in operation since 2005.The main objective for this effort is to ensure the safety of Malaysia maritime zone and the security, social and economics of the country are protected.

The significant for the safety of Malaysia's maritime zone has demonstrated the rapid development of human activities at its coastlines of 614,000 kilometre square broad. Economic activities mainly the oil and gas industries, fisheries, tourism and logistics are the main contributors to the country's income. The rapid development of other related industries has demanded the incorporation of Malaysia Maritime Enforcement Agency Air Unit in March 2010.

The current development has affected the coastal and maritime surveillance industry. This industry becomes the main support function for the maritime enforcement as well as other coastal economic activities, and is anticipated to carry on further for at least five years. The rapid transition development of world economic to the Asian region has affected Malaysia's coastal economic activities, which rises as well given that Malaysia is the main linked of ocean route for this region.

The rapid development of the coastal and maritime surveillance industry will witness the growth in new businesses. Concurrently the surveillance technology will become more competitive. However, the lack of skilled manpower to supply the demand for the profession in this industry is anticipated to be the main setback. The emerging of new entrepreneurs in this field shows their consciousness of the potentials and the increased efforts of enforcement agencies and other relevant industries to stay competitive. This is distinguished through the memorandum of understanding, joint ventures and transfer of technologies agreements between the entrepreneurs and their counterparts from the development countries come to pass. Thus it is not astounded that technologies from Norway, Netherland United Kingdom and German technologies have established here. Local industries in addition, have started involving in the productions of coastal and maritime surveillance systems components.

This rapid development demands the support of reliable professional development programs. Structured curriculum based on the national occupational skills standards is a must in order to materialise this effort. From here on Malaysia shall produce sufficient local experts jointly with new technology.

Surveillance areas of work also used to be integrated solutions to support the authority and industrial initiatives at sea. The solutions shall include a wide range of services based on proven space technologies. As a result, close collaboration with the various parties or agencies in charge of maritime surveillance, occupational standards for:

- Track ships around the globe
- Monitor strategic sea areas
- Environmental monitoring at Coastline and Waterways
- Support for offshore oil platform operations
- Protecting wildlife
- Administering a managed fishery programs
- The fight against illegal, undeclared and unregulated fishing
- Others

5. SKILLED WORKER REQUIREMENT IN THE LOCAL INDUSTRY SECTOR

Up to this instance there is no accurate survey data to trace the workforce size currently employed under this field in Malaysia. It is difficult to sort the classification and work group categorisation when the field and the job are not clearly defined. Some of them are holding mix job nature. The existence of occupational analysis with job definition for this field later will simplify the process of identifying true workforce population for research and management purposes.

For planning purposes, the estimated total number of work is done based on the number of surveillance sites identified in Malaysia. The manpower strength of every site will be forecasted according to normal capacity and operational needs.

At the moment, the total employee population in the field is estimated approximately 3,300 employees. Transmaris Techno-Sciences Sdn. Bhd. estimated a total of 16,120 employees will be serving the industry by year 2020. The estimate was based on the number of sites and the standard workforce strength per site.

ESTIMATED EMPLOYEE POPULATION BY SUB-SECTOR

Sub-sector	Total No. of Site	Nos. of Personnel			Total Personnel Per site	Total Personnel
		Operation	Technical	Others		
Port Surveillance	97	12	6	4	22	2,134
Oceanography & Fisheries Surveillance	99	6	4	4	14	1,386
Maritime Border & Coastal Surveillance	50	18	9	6	33	1,650
National Security Integrated Surveillance	71	6	4	4	14	994
Health & Safety Surveillance	290	6	4	4	14	4,060
Offshore Surveillance	200	12	6	4	22	4,400
Search & Rescue Surveillance	68	12	6	4	22	1,496
				Grand total		**16,120**

Figure 3: Estimated Employee Population in Year 2020

6. METHODOLOGY OF OCCUPATIONAL ANALYSIS

In conducting the Occupational Analysis, a kick off meeting was held primarily to strategise the Plan of Action in accordance with guidelines as stated by the Department of Skills Development (DSD) in terms of scope of study, time frame and representation by the panel of coastal & maritime surveillance experts from both the public and private sector as stated by the DSD. After the kick off meeting, a Plan of Action was formulated taking into consideration the activities and time frame required.

This chapter is divided into two sections; the proposed methodology to construct the Occupational Definition for the respective Job Titles and the methodology of the overall Occupational Analysis Process.

6.1 Methodology to construct occupational definition

The facilitator Dr. Marzuki Ujud who is an experienced facilitator in NOSS, COS, LG and WIM development employ a combination of library research, observation, interviews and DACUM methodology in defining the occupation. These methodologies are used in order to produce an Occupational Definition that is clear on the main job scope of the job title, the verb used is according to level of difficulty and the object is clearly described.

To describe the Occupational Definition clearly, the statement must consist of a ***Verb, Object*** and ***Qualifier***. The rationale of determining the definition attributes are, to ensure consistency and continuity of using those attributes right from Occupational Analysis, Job Analysis to Task Analysis Development.

(a) Object

Firstly, the object is determined before the other two attributes. The object of any job is the main determinant of distinguishing one job to the other.

The Objects are acquired from the expert panel members during a brainstorming session and written on DACUM cards so that all panel members can see the Objects identified.

(b) Verb

The Verb is then determined based on the level of difficulty of the identified job titles, such as below:

- Object + Qualifier: vessel safe passage surveillance
- Verb for Level 2: Carry out
- Verb for Level 3: Monitor

- Verb for Level 4: Review
- Verb for Level 5: Evaluate
- Verb for Level 6: Control
- Verb for Level 7: Strategize

Hence, the contents of the job definitions will be as below:

- NaSIS Operator (Level 2)
  - ✓ Carry out safe passage surveillance
- NaSIS Supervisor (Level 3)
  - ✓ Monitor safe passage surveillance
- NaSIS Superintendant (Level 4)
  - ✓ Review safe passage surveillance
- NaSIS Manager (Level 5)
  - ✓ Evaluate safe passage surveillance
- NaSIS Controller (Level 6)
  - ✓ Control safe passage surveillance
- NaSIS Strategist (Level 7)
  - ✓ ***Strategize*** *safe passage surveillance*

(c) Qualifier

Based on the example above, ***safe passages as a qualifier specify*** the ***surveillance***.

6.2 Methodology of the Overall Occupational Analysis Process

6.2.1 Literature survey

As outlined by the guidelines, a literature survey on the coastal & maritime surveillance was carried out to get some insight on the scope, policy, and activities.

The scope covered under this research includes definitions, current analysis of the sector, and the technological aspect.

6.2.2 Identifying and established contact with experts from the industry and public sectors

The literature search findings, selected field visit and interview were used as a guide to identify the scope of occupational study and analysis. Companies and experts from the coastal and maritime surveillance sector were identified and short listed. A pool of the coastal and maritime surveillance sector experts from the industry and public sector were contacted.

The list of experts contacted and confirmed are as in Annex 1.

6.2.3 Information gathering

In the process of gathering the information, three (3) methods were adopted, namely; interview, brainstorming and the Developing a Curriculum (DACUM) session.

Interviews were conducted in the development of the Occupational Analysis of the Coastal and Maritime Surveillance as follows:

NO.	NAME	DATE
1.	Mr. Finn Fjellheim Chairman/ VTS Scientist - Vis Sim AS, Norway	18 June 2010
2.	Pn. Zabedah Binti Mohamed CEO - Transmaris Techno-Sciences Sdn Bhd	25 June 2010
3.	YBhg. Laksamana Pertama (B) Dato' Noor Azman Othman Defence and Safety Consultant	14 Oct. 2010
4.	YBhg. Laksmana Maritim Datuk Amdan Kurish Ketua Pengarah, Agensi Penguatkuasaan Maritim Malaysia	19 Oct. 2010
5.	YBhg. Maj.Gen. Dato' Mazelan Kasap Ketua Turus, Markas Tentera Darat	25 Oct. 2010

The brainstorming and DACUM session were attended by expert panels who discussed the different sub sectors and areas. The information gathered was then used as input for the occupational analysis of the said industry.

6.2.4 Analysing the information

Based on the activities done as above, substantial data and information were collected. The data and information were discussed and analysed in several in-house workshop attended by selected key person or experts from the public and industry sector. The presence of the key persons or experts was to help in the development of the Occupational Analysis for this sector. During this session, attempts to frame the Coastal and Maritime Surveillance activities in Malaysia were done using the following framework:

(a) Scope of the Coastal and Maritime Surveillance
(b) Main area;
(c) Major occupational group of the industry;

(d) Job title;
(e) Hierarchy structure (Level 1 – 8); and
(f) Occupational definition.

6.2.5 Organise workshop with expert panels

Workshops were conducted in the development of the Occupational Analysis of the Coastal and Maritime Surveillance. The details of the workshops are as below:

Held on the 28 October 2010 and 29 October 2010 at the INTEKMA Resort and Convention Centre, Shah Alam. The objectives of the workshop were:

- Presentation of preliminary findings
- Outline of job title
- Career structure
- Hierarchy structure (Level 1 – 8)
- Occupational definition
- Occupational analysis session
- Validation of the findings
- Verification and proofreading of the findings

7. FINDINGS

The newly identified coastal and maritime surveillance sector were obtained through literature research, field interview and discussions with industry experts during the Occupational Analysis development sessions.

The expert panel members concluded that the coastal and maritime surveillance field consists of seven pillars or sub-sectors. The occupation in the field can be categorized into two groups i.e. Operational Group and Technical Group.

The Coastal and Maritime Surveillance pillars or sub- sectors:

1. National Security Integrated Surveillance
2. Health, Safety and Environment Surveillance
3. Offshore and Sea Surveillance
4. Maritime Border and Coastal Surveillance
5. Oceanography and Fisheries Surveillance
6. Port Surveillance
7. Search and Rescue Surveillance.

7.1 Sub-sectors

A total of seven (7) operational areas and seven (7) technical areas were identified with 91 job titles exist in the proposed sub-sectors. The industry observes that the current and future business environment demand for mix of multitasking and specialised workforce. This depends on the nature of job and responsibilities assigned. Small size organisations tend to choose multitasking compare to larger organisation. Since the technology used are changing and evolving; it would be more efficient for workers to update their knowledge and skills in their respective areas.

Below are the occupational charts showing each of the different sub-sectors.

The level 8 for port surveillance, offshore surveillance and search and rescue are not available at the moment as the capacity does not exist. Same reason also applies to level 7 for port surveillance.

Search and rescue, national security integrated surveillance and maritime border and coastal surveillance pillar entry point starts at level 2 because of the nature of job the job which carry higher responsibility and requires higher entry requirements compare to other pillars. Figure 4 shows the occupational analysis matrix of each of the different pillars.

7.2 Occupational Sub-Sector Definition

Panel members of the occupational analysis for the coastal and maritime surveillance have established the following seven definitions in the aforesaid sub-sector areas:

7.2.1 Offshore and Sea Surveillance

The main purpose of coastal surveillance system is to monitor offshore installations like platforms, loading buoys, wellheads and pipelines including monitoring the traffic flow at the controlled areas. This surveillance system also provides target sensor detection for wave parameters, oil spills, acoustic warning and other threats at the same time ensuring that the environmental function is protected.

7.2.2 Port Surveillance

A port surveillance system is to monitor activities within the protected areas at the port to support security and control functions, and to ensure the compliance with law enforcement and regulations so as to improve the port's services efficiencies. This includes the surveillance of the seabed of vessel's passageway at the port.

Port is defined as one place that are declared and accepted by any governments under the law legitimately as facilities that handle ocean-going vessels. It may also include rivers and canals that have access to the ocean.

7.2.3 National Integrated Surveillance and Security Systems

The function of the National Integrated Surveillance and Security Systems is to support the control all vessel movements / boat and aircraft, oversee joint operation or among neighbouring country, coordinate air patrolling activities, coordinate catch on maritime

coordinate air patrolling activities, coordinate catch on maritime legislation offence, coordinate communication between government agencies and marine vessels, help coordinate all operational needs and rescue, planning, coordinate and monitor special operations and collecting data on accidents. This surveillance also support the analyze activities and make recommendations on the method of joint operation, hold dialogue with consumers such as the fishery industry and other users.

7.2.4 Maritime Border and Coastal Surveillance

Maritime Border and Coastal Surveillance is the technical procedures consist of safety measures involving either human observation or through hardware to identify or tracking down movements or the position of the subject that are monitored where consideration in all aspect related to coastal and maritime are given. Major responsibility is focused on the invasion issues and political border threat as well as the economy.

7.2.5 Search and Rescue Surveillance

Monitoring the search and rescue is the technical procedure consists of safety measures involving either human observation or through hardware to identify or tracking down movements or subject position that is monitored, and where considerations in all aspect related to victim's detection and rescue target are given. The aim is to be able to provide assistance to victims that are suffering and to be able to deviate or remove dangerous situation. Time factor and communication accuracy are among the effectiveness measures for this monitoring function

7.2.6 Health, Safety and Environmental Surveillance

The health, safety and environmental surveillance systems is the technical procedure consist of safety measures involving either human observation or through hardware to identify or tracking down movements or subject positions that are monitored where all aspect related to environmental protection, health and navigational safety are considered.

7.2.7 Oceanography and Fisheries Surveillance

Oceanography & Fisheries surveillance systems is the technical procedure consist of safety measures involving either human observation or through hardware to identify or tracking down movements or subject position that is monitored, and where all aspect related to fisheries activities, sustainable protection of echo- system productivity for current and future generation, converse endangered marine species and the importance of marine economics are considered.

7.4 Occupational Definition

Job titles under Coastal & Maritime Surveillance sector have been identified and defined. Each of the job title is given a job definition as specified. The definition for all job titles is as in *Annex 2.*

8. CRITICAL AREA AND JOB TITLE

In this industry the level of supply of skilled manpower into this field determines its critical area and job. The area and job will be classified as critical if the current level supplies of skilled workforce were at the lower stage. The primary factors that influence this standpoint are the insufficient training programs or the lack of structured trainings, insufficient facilities, lack of opportunities and training sources.

The members of the industrial expert panel have determined the critical areas and job in the field at the occupational analysis workshops. They concluded that the critical areas for the coastal and maritime surveillance should be arranged according to their importance such as the following:

AREA	RANK
Offshore and Sea Surveillance	1 - Highest
Port Surveillance	2
Health, Safety and Environmental Surveillance	3
Oceanography and Fisheries Surveillance	4
Search and Rescue Surveillance	5
Maritime Border and Coastal Surveillance	6 - Lowest

The critical job title can be seen in the following tables:

Offshore and Sea Surveillance (Operation)

Critical job title

POSITION	LEVEL
Offshore and Sea Surveillance Strategist	L7
Offshore and Sea Surveillance Controller	L6
Offshore and Sea Surveillance Manager	L5
Offshore and Sea Surveillance Superintendant	L4
Offshore and Sea Surveillance Supervisor	L3
Offshore and Sea Surveillance Operator	L2
Offshore and Sea Surveillance Junior Operator	L1

Offshore and Sea Surveillance (Technical)

Critical job title

POSITION	LEVEL
Offshore and Sea Surveillance Technologist	L7
Offshore and Sea Surveillance Senior Technical Manager	L6
Offshore and Sea Surveillance Technical Manager	L5
Offshore and Sea Surveillance Assistant Technical Manager	L4
Offshore and Sea Surveillance Technical Supervisor	L3
Offshore and Sea Surveillance Technician	L2
Offshore and Sea Surveillance Junior Technician	L1

Offshore and Sea Surveillance (Technical)

Critical job title

POSITION	LEVEL
N/A	L7
Port Surveillance VTS Controller	L6
Port Surveillance VTS Manager	L5
Port Surveillance VTS Superintendant	L4
Port Surveillance VTS Supervisor	L3
Port Surveillance VTS Operator	L2
Port Surveillance Junior VTS Operator	L1

Port Surveillance (Technical)

Critical job title

POSITION	LEVEL
N/A	L7
Port Surveillance Senior Technical Manager	L6
Port Surveillance Technical Manager	L5
Port Surveillance Assistant Technical Manager	L4
Port Surveillance Technical Supervisor	L3
Port Surveillance Technician	L2
Port Surveillance Junior Technician	L1

Health, Safety and Environment Surveillance (Operation)

Critical job title

POSITION	LEVEL
Health, Safety and Environmental Surveillance Strategist	L7
Health, Safety and Environmental Surveillance Controller	L6
Health, Safety and Environmental Surveillance Manager	L5
Health, Safety and Environmental Surveillance Superintendant	L4
Health, Safety and Environmental Surveillance VTS Supervisor	L3
Health, Safety and Environmental Surveillance VTS Operator	L2
Health, Safety and Environmental Surveillance Junior VTS Operator	L1

Health, Safety & Environmental Surveillance (Technical)

Critical job title

POSITION	LEVEL
Health, Safety and Environmental Surveillance Technologist	L7
Health, Safety and Environmental Surveillance Senior Technical Manager	L6
Health, Safety and Environmental Surveillance Technical Manager	L5
Health, Safety and Environmental Surveillance Assistant Technical Manager	L4
Health, Safety and Environmental Surveillance Technical Supervisor	L3
Health, Safety and Environmental Surveillance Technician	L2
Health, Safety and Environmental Surveillance Junior Technician	L1

Oceanography and Fisheries Surveillance (Operational)

Critical job title

POSITION	LEVEL
Oceanography and Fisheries Surveillance Strategist	L7
Oceanography and Fisheries Surveillance Controller	L6
Oceanography and Fisheries Surveillance Manager	L5
Oceanography and Fisheries Surveillance Superintendant	L4
Oceanography and Fisheries Surveillance Supervisor	L3
Oceanography and Fisheries Surveillance Operator	L2
Oceanography and Fisheries Surveillance Junior Operator	L1

Oceanography and Fisheries Surveillance (Technical)

Critical job title

POSITION	LEVEL
Oceanography and Fisheries Surveillance Senior Technical Manager	L6
Oceanography and Fisheries Surveillance Technical Manager	L5
Oceanography and Fisheries Surveillance Assistant Technical Manager	L4
Oceanography and Fisheries Surveillance Technical Supervisor	L3
Oceanography and Fisheries Surveillance Technician	L2
Oceanography and Fisheries Surveillance Junior Technician	L1

Search and Rescue Surveillance (Operational)

Critical job title

POSITION	LEVEL
Search and Rescue Surveillance Strategist	L7
Search and Rescue Surveillance Senior Controller	L6
Search and Rescue Surveillance Manager	L5
Search and Rescue Surveillance Superintendant	L4
Search and Rescue Surveillance Supervisor	L3
Search and Rescue Surveillance Operator	L2
N/A	L1

Search and Rescue Surveillance (Technical)

Critical job title

POSITION	LEVEL
Search and Rescue Surveillance Technologist	L7
Search and Rescue Surveillance Senior Technical Manager	L6
Search and Rescue Surveillance Technical Manager	L5
Search and Rescue Surveillance Assistant Technical Manager	L4
Search and Rescue Surveillance Technical Supervisor	L3
Search and Rescue Surveillance Technician	L2
N/A	L1

Search and Rescue Surveillance (Operational)

Critical job title

POSITION	LEVEL
Maritime Border & Coastal Surveillance Strategist	L7
Maritime Border & Coastal Surveillance Controller	L6
Maritime Border & Coastal Surveillance Manager	L5
Maritime Border & Coastal Surveillance Superintendant	L4
Maritime Border & Coastal Surveillance Supervisor	L3
Maritime Border & Coastal Surveillance Operator	L2
N/A	L1

Search and Rescue Surveillance (Technical)

Critical job title

POSITION	LEVEL
Maritime Border & Coastal Surveillance Technologist	L7
Maritime Border & Coastal Surveillance Senior Technical Manager	L6
Maritime Border & Coastal Surveillance Technical Manager	L5
Maritime Border & Coastal Surveillance Assistant Technical Manager	L4
Maritime Border & Coastal Surveillance Technical Supervisor	L3
Maritime Border & Coastal Surveillance Technician	L2
Maritime Border & Coastal Surveillance Junior Technician	L1

9. NON-CRITICAL AREA AND JOB TITLE

The non-critical job area and critical job title have been determined during the Occupational Analysis workshop. The expert panel members concluded that the National Security Integrated Surveillance is non-critical area of the Coastal & Maritime Surveillance sector. The non-critical job title can be seen in the following tables:

National Security Integrated Surveillance (Operation)

Non-critical job title

POSITION	LEVEL
National Security Integrated Surveillance Strategist	L7
National Security Integrated Surveillance Controller	L6
National Security Integrated Surveillance Manager	L5
National Security Integrated Surveillance Superintendant	L4
National Security Integrated Surveillance Supervisor	L3
National Security Integrated Surveillance Operator	L2
N/A	L1

National Security Integrated Surveillance (Technical)

Non-critical job title

POSITION	LEVEL
National Security Integrated Surveillance Technologist	L7
National Security Integrated Surveillance Senior Technical Manager	L6
National Security Integrated Surveillance Technical Manager	L5
National Security Integrated Surveillance Assistant Technical Manager	L4
National Security Integrated Surveillance Technical Supervisor	L3
National Security Integrated Surveillance Technician	L2
National Security Integrated Surveillance Junior Technician	L1

Level	SECTOR : COASTAL & MARITIME SURVEILLANCE													
	Port & Harbor Surveillance (PoHS)	Offshore & Sea Surveillance (OSS)	Search & Rescue Surveil lance (SARS)	National Security Integrated Surveillance (NaSIS)	Maritime Border & Coastal Surveillance (MBCSS)	Oceanography & Fisheries Surveillance (OFS)	Health, Safety & Environmental Surveillance (HSES)	Offshore & Sea Surveillance (OSS)	Maritime Border & Coastal Surveillance (MBCSS)	National Security Integrated Surveillance (NaSIS)	Health, Safety & Environmental Surveillance (HSES)	Search & Rescue (SAR)	Oceanography & Fisheries Surveillance (OFS)	Port & Harbor Surveillance (PoHS)
	OPERATIONAL							TECHNICAL						
8	NA	NA	NA	Coastal & Maritime Surveillance Scientist										NA
7	NA	OSS Strategist	SAR Strategist	NaSIS Strategist	MBCSS Strategist	OFS Strategist	HSES Strategist	OSS Technologist	NaSIS Technologist		HSES Technologist		OFS Technologist	NA
6	PS VTS Controller	OSS Controller	SARS Controller	NaSIS Controller	MBCSS Controller	OFS Controller	HSES Controller	OSS Senior Technical Manager	MBCSS Senior Technical Manager	NaSIS Senior Technical Manager	HSES Senior Technical Manager	SAR Senior Technical Manager	OFS Senior Technical Manager	PS Senior Techni Manager
5	PS VTS Manager	OSS Manager	SARS Manager	NaSIS Manager	MBCSS Manager	OFS Manager	HSES Manager	OSS Technical Manager	MBCSS Technical Manager	NaSIS Technical Manager	HSES Technical Manager	SAR Technical Manager	OFS Technical Manager	PS Technical Manager
4	PS VTS SUPT	OSS SUPT	SARS SUPT	NaSIS SUPT	MBCSS SUPT	OFS SUPT	HSES VTS SUPT	OSS Assist Technical Manager	MBCSS Assist Technical Manager	NaSIS Assist Technical Manager	HSES Assist Technical Manager	SAR Assist Technical Manager	OFS Assist Technical Manager	PS Assist Technical Manager
3	PS VTS Supervisor	OSS Supervisor	SARS Supervisor	NaSIS Supervisor	MBCSS Supervisor	OFS Supervisor	HSES VTS Supervisor	OSS TECH Supervisor	MBCSS TECH Supervisor	NaSIS TECH Supervisor	HSES TECH Supervisor	SAR TECH Supervisor	OFS TECH Supervisor	PS TECH Supervisor
2	PS VTS Operator	OSS Operator	SARS Operator	NaSIS Operator	MBCSS Operator	OFS Senior Operator	HSES Senior VTS Operator	OSS TECHN	MBCSS TECHN	NaSIS TECHN	HSES TECHN	SAR TECHN	OFS TECHN	PS TECHN
1	PS Junior VTS Operator	OSS Junior Operator	NA	NA	NA	OFS Junior Operator	HSES Junior VTS Operator	OSS Junior TECHN	MBCSS Junior TECHN	NaSIS Junior TECHN	HSES Junior TECHN	NA	OFS Junior TECHN	PS Junior TECHN

Figure 4: Proposed Coastal and Maritime Surveillance OA Matrix

10. CONCLUSION

The coastal and maritime surveillance field in Malaysia has long been established however, it has not been developed into a well-defined specialized profession. Nevertheless, this field is vital for Malaysia as it strongly supports the activities involving Malaysia's offshore and coastal economics, social and national securities.

The occupational analysis of this occupation is the most important groundwork in the initiation process to develop it into a popular and reputable profession.

The appointed Occupational Analysis Panels have concluded the following:

- The definition of the Coastal and Maritime Surveillance field;
- The definition of the Subsections of the Coastal and Maritime Surveillance;
- The positions in the Coastal and Maritime Surveillance are divided into two divisions i.e. the operations and the technical divisions.
- The 91 jobs titles in the Coastal and Maritime Surveillance field; and
- The job definition of all 91 job titles in the Coastal and Maritime Surveillance field.

The member of the expert panels anticipated that the Coastal and Maritime Surveillance field will continue to develop in Malaysia and estimated the total 3,300 workforces today will increase to approximately 16,120 in year 2020.

They are of the opinion that the 85.7 percent of the current existing positions are the critical ones. Malaysia is currently in need of the supply of the coastal and maritime surveillance skilled manpower to cater the industry demand and enhancing the present quality of service.

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ANNEX 1

LIST OF EXPERT PANEL FOR THE COASTAL & MARITIME SURVEILLANCE OCCUPATIONAL ANALYSIS WORKSHOP

PANEL		
1.	En. Omar Bin Mokhtar	Ketua Penolong Pengarah Kanan, Agensi Penguatkuasaan Maritim Malaysia
2.	En.Ahmad Bin Nordin	Ketua Penolong Pengarah - Unit Trafik MaritimJabatan Laut Malaysia
3.	Capt.Maritime Abdullah Bin Sukran	Ketua Penolong Pengarah – Sumber Manusia Agensi Penguatkuasaan Maritim Malaysia
4.	Pn. Zabedah Binti Mohamed	Chief Executive Officer Transmaris Techno-Sciences Sdn Bhd.
5.	Mr.Nadaraj Chidambaram	Manager / VTS Consultant Puncak Teknologi Sdn Bhd. Shah Alam.
6.	Capt.Kamal Ariffin Idris	Pegawai Laut – Vessel Traffic Mgt.Surveillance Lembaga Pelabuhan Klang
7.	Mr.Tiew Biaw Sing	Manager Transmaris Techno-Sciences Sdn Bhd. K.Lumpur.
8.	Maj.Mohd Hamdan Bin Adenan	Pegawai Staff 2 Elektronik Markas Logistik Tentera Darat – Kump.JLJ. Jln Padang Tembak, K.Lumpur.
9.	Maj.Palil Bin Md Tap	Pegawai Staff 2 Operasi Cawangan Perisikan, Markas Tentera Darat, Wisma Pertahanan, K.Lumpur.
FACILITATOR		
1.	Dr. Marzuki bin Ujud	President - OHRM Consult Sdn. Bhd. Kuala Lumpur

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ANNEX 2

JOB DEFINITION FOR OPERATIONAL POSITIONS

NATIONAL SECURITY
INTEGRATED SURVEILLANCE (NaSIS)

LEVEL 2

NASIS OPERATOR

A NASIS OPERATOR IS DESIGNATED TO CARRY OUT NaSIS SURVEILLANCE OPERATION IN ACCORDANCE WITH AGENCY AND OR AUTHORITIES SPECIFICATIONS AND REQUIREMENTS. THE DUITES AND RESPONSIBILITIES CAN BE FULLFILLED BY MEANS OF THE PROVIDED TELECOMMUNICATIONS AND INFORMATION SYSTEM. THE OPERATION MAY INVOLVE INTELLIGENCE ACTIVITIES, CRYPTOLOGY, RELATED NATIONAL SECURITY, EQUIPMENT THAT IS AN INTEGRAL PART OF A WEAPON SYSTEM; OR INTELLIGENT MISSION RELATED TO NATIONAL SECURITY AND SAFETY AID.

In particular the person will:

1. Perform total maritime domain awareness (TMDA) surveillance activities
2. Carry out territorial water crime prevention surveillance
3. Carry out vessel safe passage surveillance
4. Carry out maritime environmental protection surveillance
5. Carry out maritime treasury interest surveillance
6. Carry out maritime custom and excise interest surveillance
7. Carry out maritime transportation protection surveillance
8. Carry out maritime uninterrupted trade monitoring

9. Carry out maritime sovereign preservation monitoring
10. Carry out radar video integrated surveillance
11. Carry out vessel tracking integrated surveillance
12. Carry out hydrographic survey integrated surveillance
13. Carry out seaward invasion defend surveillance
14. Carry out maritime border interest surveillance
15. Carry out sea surveillance system (SWASLA) cooperation
16. Carry out piracy reporting surveillance cooperation
17. Carry out mandatory ship reporting system centre (STRAITREP) surveillance
18. Perform MNMA law enforcement surveillance

NATIONAL SECURITY
INTEGRATED SURVEILLANCE (NaSIS)
LEVEL 3

NASIS SUPERVISOR

A NASIS SUPERVISOR IS DESIGNATED TO CARRY OUT NaSIS SURVEILLANCE OPERATION SUPERVISION IN ACCORDANCE WITH AGENCY AND OR AUTHORITIES SPECIFICATIONS AND REQUIREMENTS. THE DUTIES AND RESPONSIBILITIES CAN BE FULLFILED BY MEANS OF THE PROVIDED TELECOMMUNICATIONS AND INFORMATION SYSTEM. THE OPERATION MAY INVOLVE INTELLIGENCE ACTIVITIES, CRYPTOLOGY, RELATED NATIONAL SECURITY, EQUIPMENT THAT IS AN INTEGRAL PART OF A WEAPON SYSTEM; OR INTELLIGENT MISSION RELATED TO NATIONAL SECURITY AND SAFETY AID.

In particular the person will:

1. Perform total maritime domain awareness (TMDA) surveillance activities
2. Monitor territorial water crime prevention surveillance
3. Monitor vessel safe passage surveillance
4. Monitor maritime environmental protection surveillance
5. Monitor maritime treasury interest surveillance
6. Monitor maritime custom & excise interest surveillance
7. Monitor maritime transportation protection surveillance
8. Monitor maritime uninterrupted trade monitoring
9. Monitor maritime sovereign preservation monitoring

10. Monitor radar video integrated surveillance
11. Monitor vessel tracking integrated surveillance
12. Monitor hydrographic survey integrated surveillance
13. Monitor seaward invasion defend surveillance
14. Monitor maritime border interest surveillance
15. Monitor sea surveillance system (SWASLA) cooperation
16. Monitor piracy reporting surveillance cooperation
17. Monitor mandatory ship reporting system centre (STRAITREP) surveillance
18. Monitor MNMA law enforcement surveillance
19. Perform NaSIS Surveillance supervisory function

NATIONAL SECURITY

INTEGRATED SURVEILLANCE (NaSIS)

LEVEL 4

NASIS SUPERIENTANDANT

A NASIS SUPERINTENDANT IS DESIGNATED TO CARRY OUT NaSIS SURVEILLANCE ADMINISTRATION IN ACCORDANCE WITH AGENCY AND OR AUTHORITIES SPECIFICATIONS AND REQUIREMENTS. THE DUTIES AND RESPONSIBILITIES CAN BE FULLFILED BY MEANS OFTHE PROVIDED TELECOMMUNICATIONS AND INFORMATION SYSTEM. THE OPERATION MAY INVOLVE INTELLIGENCE ACTIVITIES, CRYPTOLOGY, RELATED NATIONAL SECURITY, EQUIPMENT THAT IS AN INTEGRAL PART OF A WEAPON SYSTEM; OR INTELLIGENT MISSION RELATED TO NATIONAL SECURITY AND SAFETY AID.

In particular the person will:

1. Administer total maritime domain awareness (TMDA) surveillance activities
2. Administer territorial water crime prevention surveillance
3. Administer vessel safe passage surveillance
4. Administer maritime environmental protection surveillance
5. Administer maritime treasury interest surveillance
6. Administer maritime custom and excise interest surveillance
7. Administer maritime transportation protection surveillance
8. Administer maritime uninterrupted trade administering
9. Administer maritime sovereign preservation administering
10. Administer radar video integrated surveillance

11. Administer vessel tracking integrated surveillance
12. Administer hydrographic survey integrated surveillance
13. Administer seaward invasion defend surveillance
14. Administer maritime border interest surveillance
15. Administer sea surveillance system (SWASLA) cooperation
16. Administer piracy reporting surveillance cooperation
17. Administer mandatory ship reporting system centre (STRAITREP) surveillance
18. Administer MNMA law enforcement surveillance
19. Perform NaSIS Surveillance administrative function

NATIONAL SECURITY
INTEGRATED SURVEILLANCE (NaSIS)
LEVEL 5

NASIS MANAGER

A NASIS MANAGER IS DESIGNATED TO CARRY OUT NaSIS SURVEILLANCE MANAGEMENT IN ACCORDANCE WITH AGENCY AND OR AUTHORITIES SPECIFICATIONS AND REQUIREMENTS. THE DUTIES AND RESPONSIBILITIES CAN BE FULLFILED BY MEANS OF THE PROVIDER TELECOMMUNICATIONS AND INFORMATION SYSTEM. THE OPERATION MAY INVOLVE INTELLIGENCE ACTIVITIES, CRYPTOLOGY, RELATED NATIONAL SECURITY, EQUIPMENT THAT IS AN INTEGRAL PART OF A WEAPON SYSTEM; OR INTELLIGENT MISSION RELATED TO NATIONAL SECURITY AND SAFETY AID.

In particular the person will:

1. Manage total maritime domain awareness (TMDA) surveillance activities
2. Manage territorial water crime prevention surveillance
3. Manage vessel safe passage surveillance
4. Manage maritime environmental protection surveillance
5. Manage maritime treasury interest surveillance
6. Manage maritime custom & excise interest surveillance
7. Manage maritime transportation protection surveillance
8. Manage maritime uninterrupted trade Managing
9. Manage maritime sovereign preservation Managing

9. Carry out maritime sovereign preservation monitoring
10. Carry out radar video integrated surveillance
11. Carry out vessel tracking integrated surveillance
12. Carry out hydrographic survey integrated surveillance
13. Carry out seaward invasion defend surveillance
14. Carry out maritime border interest surveillance
15. Carry out sea surveillance system (SWASLA) cooperation
16. Carry out piracy reporting surveillance cooperation
17. Carry out mandatory ship reporting system centre (STRAITREP) surveillance
18. Perform MNMA law enforcement surveillance

NATIONAL SECURITY

INTEGRATED SURVEILLANCE (NaSIS)

LEVEL 6

NASIS CONTROLLER

A NASIS CONTROLLER IS DESIGNATED TO CARRY OUT NaSIS SURVEILLANCE MANAGEMENT CONTROL IN ACCORDANCE WITH AGENCY AND OR AUTHORITIES SPECIFICATIONS AND REQUIREMENTS. THE DUTIES AND RESPONSIBILITIES CAN BE FULLFILED BY MEANS OFTHE PROVIDED TELECOMMUNICATIONS AND INFORMATION SYSTEM. THE OPERATION MAY INVOLVE INTELLIGENCE ACTIVITIES, CRYPTOLOGY, RELATED NATIONAL SECURITY, EQUIPMENT THAT IS AN INTEGRAL PART OF A WEAPON SYSTEM; OR INTELLIGENT MISSION RELATED TO NATIONAL SECURITY AND SAFETY AID.

In particular the person will:

1. Control total maritime domain awareness (TMDA) surveillance activities management
2. Control territorial water crime prevention surveillance management
3. Control vessel safe passage surveillance management
4. Control maritime environmental protection surveillance management
5. Control maritime treasury interest surveillance management
6. Control maritime custom and excise interest surveillance management
7. Control maritime transportation protection surveillance management
8. Control maritime uninterrupted trade controlling management

9. Control maritime sovereign preservation controlling management
10. Control radar video integrated surveillance management
11. Control vessel tracking integrated surveillance management
12. Control hydrographic survey integrated surveillance management
13. Control seaward invasion defend surveillance management
14. Control maritime border interest surveillance management
15. Control sea surveillance system (SWASLA) cooperation management
16. Control piracy reporting surveillance cooperation management
17. Control mandatory ship reporting system centre (STRAITREP) surveillance management
18. Control MNMA law enforcement surveillance management
19. Perform NaSIS surveillance management control function

NATIONAL SECURITY
INTEGRATED SURVEILLANCE (NaSIS)
LEVEL 7

NASIS STARTEGIST

A NASIS STRATEGIST IS DESIGNATED TO LEAD NaSIS SURVEILLANCE OPERATION IN ACCORDANCE WITH AGENCY AND OR AUTHORITIES SPECIFICATIONS AND REQUIREMENTS. THE DUTIES AND RESPONSIBILITIES CAN BE FULLFILED BY MEANS OF THE PROVIDED TELECOMMUNICATIONS & INFORMATION SYSTEM. THE OPERATION MAY INVOLVE INTELLIGENCE ACTIVITIES, CRYPTOLOGY, RELATED NATIONAL SECURITY, EQUIPMENT THAT IS AN INTEGRAL PART OF A WEAPON SYSTEM; OR INTELLIGENT MISSION RELATED TO NATIONAL SECURITY AND SAFETY AID.

In particular the person will:

1. Lead total maritime domain awareness (TMDA) surveillance activities
2. Lead territorial water crime prevention surveillance
3. Lead vessel safe passage surveillance
4. Lead maritime environmental protection surveillance
5. Lead maritime treasury interest surveillance
6. Lead maritime custom and excise interest surveillance
7. Lead maritime transportation protection surveillance
8. Lead maritime uninterrupted trade leading
9. Lead maritime sovereign preservation leading

10. Lead radar video integrated surveillance
11. Lead vessel tracking integrated surveillance
12. Lead hydrographic survey integrated surveillance
13. Lead seaward invasion defend surveillance
14. Lead maritime border interest surveillance
15. Lead sea surveillance system (SWASLA) cooperation
16. Lead piracy reporting surveillance cooperation
17. Lead mandatory ship reporting system centre (STRAITREP) surveillance
18. Lead MNMA law enforcement surveillance
19. Perform NaSIS surveillance departmental leading function
20. Formulate NaSIS surveillance strategic plan

MARITIME BORDER & COASTAL SURVEILLANCE (MBCS)

LEVEL 2

MBCS OPERATOR

A MBCS OPERATOR IS DESIGNATED TO CARRY OUT MBCS SURVEILLANCE OPERATION INACCORDANCE WITH ORGANIZATION AND OR RELATED AUTHORITY SPECIFICATION AND REQUIREMENTS.THE DUTIES AND RESPONSIBILITIES MAY ACCOMPLISHED THROUGH WIDE AREA SURVEILLANCE SISTEM DETECTION USING APPLICATION ON MULTI SENSOR INTEGRATION, INFORMATION STORAGE & PROCESSING, DISPLAY AND DISSEMINATION TO SUPPORT CRITICAL DECISION-MAKING. USAGE OF CROSS-BORDER COMMUNICATION SYSTEM ENABLES INFORMATION SHARING AMONG MARITIME ENFORCEMENT AGENCY, CUSTOMS, POR TAUTHORITIES AND MERGENCYRESPONSEAGENCIES. AS SUCH INFORMATION COULD BE UTILISED, ALL TARGETED PARTIES COULD BE PROTECTED FROM THREATS ATTACKS.

In particular the person will:

1. Perform coastal surveillance activities
2. Carry out vessel tracking
3. Carry out floating obstacles detecting
4. Carry out coastal unlawful activities manual scanning
5. Carry out small surface target detecting
6. Carry out coastal illegal immigration prevention
7. Carry out coastal drug trafficking prevention

8. Perform maritime border surveillance activities
9. Carry out illegal fisheries preventing
10. Carry out maritime border threat alerting
11. Carry out air-borne target detection coordinating
12. Carry out maritime border traffic controlling
13. Carry out maritime firing range surveillance
14. Create firing zone
15. Carry out oil spill radar imaging

MARITIME BORDER AND COASTAL SURVEILLANCE (MBCSS)
LEVEL 3

MBCS SUPERVISOR

A MBCS SUPERVISOR IS DESIGNATED TO SUPERVISE MBCS SURVEILLANCE OPERATION INACCORDANCE WITH ORGANIZATION AND OR RELATED AUTHORITY SPECIFICATION AND REQUIREMENTS.THE DUTIES AND RESPONSIBILITIES MAY ACCOMPLISHED THROUGH WIDE AREA SURVEILLANCE SISTEM DETECTION USING APPLICATION ON MULTI SENSOR INTEGRATION, INFORMATION STORAGE & PROCESSING, DISPLAY AND DISSEMINATION TO SUPPORT CRITICAL DECISION-MAKING. USAGE OF CROSS-BORDER COMMUNICATION SYSTEM ENABLES INFORMATION SHARING AMONG MARITIME ENFORCEMENT AGENCY, CUSTOMS, PORT AUTHORITIES AND EMERGENCY RESPONSE AGENCIES. AS SUCH INFORMATION COULD BE UTILISED, ALL TARGETED PARTIES COULD BE PROTECTED FROM THREATS ATTACKS.

In particular the person will:

1. Perform coastal surveillance activities
2. Monitor vessel tracking
3. Monitor floating obstacles detecting
4. Monitor coastal unlawful activities manual scanning
5. Monitor small surface target detecting
6. Monitor coastal illegal immigration prevention
7. Monitor coastal drug trafficking prevention
8. Perform maritime border surveillance activities
9. Monitor illegal fisheries preventing

10. Monitor maritime border threat alerting
11. Monitor air-borne target detection coordinating
12. Monitor maritime border traffic controlling
13. Monitor maritime firing range surveillance
14. Create firing zone
15. Monitor oil spill radar imaging

MARITIME BORDER AND COASTAL SURVEILLANCE (MBCS) LEVEL 4

MBCSS SUPERINTENDANT

A MBCS SUPERINTENDANT IS DESIGNATED TO ADMINISTER MBCS SURVEILLANCE OPERATION INACCORDANCE WITH ORGANIZATION AND OR RELATED AUTHORITY SPECIFICATION AND REQUIREMENTS. THE DUTIES AND RESPONSIBILITIES MAY ACCOMPLISHED THROUGH WIDE AREA SURVEILLANCE SISTEM DETECTION USING APPLICATION ON MULTI SENSOR INTEGRATION, INFORMATION STORAGE & PROCESSING, DISPLAY AND DISSEMINATION TO SUPPORTCRITICAL DECISION-MAKING. USAGE OF CROSS-BORDER COMMUNICATION SYSTEM ENABLES INFORMATION SHARING AMONG MARITIME ENFORCEMENT AGENCY, CUSTOMS, PORT AUTHORITIES AND EMERGENCY RESPONSE AGENCIES. AS SUCH INFORMATION COULD BE UTILISED, ALLTARGETED PARTIES COULD BE PROTECTED FROM THREATS ATTACKS.

In particular the person will:

1. Administer coastal surveillance activities
2. Administer vessel tracking
3. Administer floating obstacles detecting
4. Administer coastal unlawful activities manual scanning
5. Administer small surface target detecting
6. Administer coastal illegal immigration prevention
7. Administer coastal drug trafficking prevention
8. Perform maritime border surveillance activities

9. Administer illegal fisheries preventing
10. Administer maritime border threat alerting
11. Administer air-borne target detection coordinating
12. Administer maritime border traffic controlling
13. Administer maritime firing range surveillance
14. Administer firing zone creation
15. Administer oil spill radar imaging

MARITIME BORDER AND COASTAL SURVEILLANCE (MBCS)

LEVEL 5

MBCS MANAGER

A MBCS MANAGER IS DESIGNATED TO MANAGE MBCS SURVEILLANCE OPERATION IN ACCORDANCE WITH ORGANIZATION AND OR RELATED AUTHORITY SPECIFICATION AND REQUIREMENTS. THE DUTIES AND RESPONSIBILITIES MAY ACCOMPLISHED THROUGH WIDE AREA SURVEILLANCE SISTEM DETECTION USING APPLICATION ON MULTI SENSOR INTEGRATION, INFORMATION STORAGE & PROCESSING, DISPLAY AND DISSEMINATION TO SUPPORT CRITICAL DECISION-MAKING. USAGE OFCROSS-BORDERCOMMUNICATION SYSTEM ENABLES INFORMATION SHARING AMONG MARITIME ENFORCEMENT AGENCY, CUSTOMS, PORT AUTHORITIES AND EMERGENCY RESPONSE AGENCIES. AS MUCH INFORMATION COULD BE UTILISED, ALL TARGETED PARTIES COULD BE PROTECTED FROM THREATS ATTACKS.

In particular the person will:

1. Manage coastal surveillance activities
2. Manage vessel tracking
3. Manage floating obstacles detecting
4. Manage coastal unlawful activities manual scanning
5. Manage small surface target detecting
6. Manage coastal illegal immigration prevention

7. Manage coastal drug trafficking prevention
8. Manage maritime border surveillance activities
9. Manage illegal fisheries preventing
10. Manage maritime border threat alerting
11. Manage air-borne target detection coordinating
12. Manage maritime border traffic controlling
13. Manage maritime firing range surveillance
14. Manage firing zone creation
15. Manage oil spill radar imaging
16. Perform departmental management function

MARITIME BORDER AND COASTAL SURVEILLANCE (MBCS)

LEVEL 6

MBCS CONTROLLER

A MBCS CONTROLLER IS DESIGNATED TO CONTROL MBCS SURVEILLANCE OPERATION MANAGEMENT IN ACCORDANCE WITH ORGANIZATION AND OR RELATED AUTHORITY SPECIFICATION AND REQUIREMENTS. THE DUTIES AND RESPONSIBILITIES MAY ACCOMPLISHED THROUGH WIDE AREA SURVEILLANCE SISTEM DETECTION USING APPLICATION ON MULTI SENSOR INTEGRATION, INFORMATION STORAGE AND PROCESSING, DISPLAY AND DISSEMINATION TO SUPPORT CRITICAL DECISION-MAKING. USAGE OF CROSS-BORDER COMMUNICATION SYSTEM ENABLES INFORMATION SHARING AMONG MARITIME ENFORCEMENT AGENCY, CUSTOMS, PORT AUTHORITIES AND EMERGENCY RESPONSE AGENCIES. AS SUCH INFORMATION COULD BE UTILISED, ALL TARGETED PARTIES COULD BE PROTECTED FROM THREATS ATTACKS.

In particular the person will:

1. Control coastal surveillance activities management
2. Control vessel tracking management
3. Control floating obstacles detecting management
4. Control coastal unlawful activities manual scanning management
5. Control small surface target detecting management
6. Control coastal illegal immigration prevention management
7. Control coastal drug trafficking prevention management

8. Control maritime border surveillance activities management
9. Control illegal fisheries preventing management
10. Control maritime border threat alerting management
11. Control air-borne target detection coordinating management
12. Control maritime border traffic controlling management
13. Control maritime firing range surveillance management
14. Control firing zone creation management
15. Control oil spill radar imaging management
16. Perform departmental management control function

MARITIME BORDER AND COASTAL SURVEILLANCE (MBCS)

LEVEL 7

MBCSS STRATEGIST

A MBCS STRATEGIST IS DESIGNATED TO LEAD MBCS SURVEILLANCE OPERATION IN ACCORDANCE WITH ORGANISATION AND OR RELATED AUTHORITY SPECIFICATION AND REQUIREMENTS. THE DUTIES AND RESPONSIBILITIES MAY ACCOMPLISHED THROUGH WIDE AREA SURVEILLANCE SISTEM DETECTION USING APPLICATION ON MULTI SENSOR INTEGRATION, INFORMATION STORAGE AND PROCESSING, DISPLAY AND DISSEMINATION TO SUPPORT CRITICAL DECISION-MAKING. USAGE OF CROSS-BORDER COMMUNICATION SYSTEM ENABLES INFORMATION SHARING AMONG MARITIME ENFORCEMENT AGENCY, CUSTOMS, PORT AUTHORITIES AND EMERGENCY RESPONSE AGENCIES. AS SUCH INFORMATION COULD BEUTILISED, ALL TARGETED PARTIES COULD BE PROTECTED FROM THREATS ATTACKS.

In particular the person will:

1. Lead coastal surveillance activities
2. Lead vessel tracking
3. Lead floating obstacles detecting
4. Lead coastal unlawful activities manual scanning
5. Lead small surface target detecting
6. Lead coastal illegal immigration prevention
7. Lead coastal drug trafficking prevention

8. Lead maritime border surveillance activities
9. Lead illegal fisheries preventing
10. Lead maritime border threat alerting
11. Lead air-borne target detection coordinating
12. Lead maritime border traffic controlling
13. Lead maritime firing range surveillance
14. Lead firing zone creation
15. Lead oil spill radar imaging
16. Perform departmental Leading function

OCEANOGRAPHY AND FISHERIES SURVEILLANCE (OFS)

LEVEL 1

OFS JUNIOR OPERATOR

An OFS JUNIOR OPERATOR IS DESIGNATED TO CARRY OUT OFS SURVEILLANCE OPERATIONAL SUPPORT ACTIVITIES IN SUPPORTING FISHERIES ACTIVITIES MANAGEMENT, SUSTAINABLE PROTECTION OF ECHOSYSTEM PRODUCTIVITY FOR CURENT AND FUTURE GENERATION. INCUMBENTS DUTIES AND RESPONSIBILITIES SHALL BE EMBEDED WITH THE RESPONSIBILITY TO CONSERVE ENDANGERED MARINE SPECIES, OCEANOGRAPHY, AND THE IMPORTANCE OF MARITIME ECONOMICS.

In particular the person will:

1. Carry out fisheries offending detecting support activities
2. Carry out unregulated fishing detecting support activities
3. Carry out misreporting catch detecting support activities
4. Carry out fisheries surveillance reporting support activities
5. Carry out fisheries weather threat reporting support activities
6. Carry out fisheries oceanography threat reporting support activities
7. Carry out fisheries sea survival reporting support activities
8. Perform oceanography & fisheries compliance surveillance support activities
9. Carry out fisheries vessel compliance monitoring support activities
10. Carry out berthing compliance monitoring support activities
11. Carry out fisheries navigability protection support activities
12. Carry out fisheries vessel traffic protection surveillance support activities
13. Carry out seaworthy vessel outfit surveillance support activities.

OCEANOGRAPHY AND FISHERIES SURVEILLANCE (OFS)

LEVEL 2

OFS OPERATOR

AN OFS OPERATOR IS DESIGNATED TO CARRY OUT OFS SURVEILLANCE OPERATIONAL ACTIVITIES IN SUPPORTING FISHERIES ACTIVITIES MANAGEMENT, SUSTAINABLE PROTECTION OF ECHOSYSTEM PRODUCTIVITY FOR CURENT AND FUTURE GENERATION. INCUMBENTS DUTIES AND RESPONSIBILITIES SHALL BE EMBEDDED WITH THE RESPONSIBILITY TO CONSERVE ENDANGERED MARINE SPECIES, OCEANOGRAPHY, AND THE IMPORTANCE OF MARITIME ECONOMICS.

In particular the person will:

1. Perform fisheries offending detecting
2. Carry out unregulated fishing detecting
3. Carry out misreporting catch detecting
4. Perform fisheries surveillance reporting
5. Carry out fisheries weather threat reporting
6. Carry out fisheries oceanography threat reporting
7. Carry out fisheries sea survival reporting
8. Perform oceanography and fisheries compliance surveillance
9. Carry out fisheries vessel compliance monitoring
10. Carry out berthing compliance monitoring
11. Perform fisheries navigability protection
12. Carry out fisheries vessel traffic protection surveillance
13. Carry out seaworthy vessel outfit surveillance

OCEANOGRAPHY AND FISHERIES SURVEILLANCE (OFS)

LEVEL 3

OFS SUPERVISOR

AN OFS SUPERVISOR IS DESIGNATED TO SUPERVISE OFS SURVEILLANCE OPERATIONAL ACTIVITIES IN SUPPORTING FISHERIES ACTIVITIES MANAGEMENT, SUSTAINABLE PROTECTION OF ECOSYSTEM PRODUCTIVITY FOR CURENT AND FUTURE GENERATION. INCUMBENTS DUTIES AND RESPONSIBILITIES SHALL BE EMBEDDED WITH THE RESPONSIBILITY TO CONSERVE ENDANGERED MARINE SPECIES, OCEANOGRAPHY, AND THE IMPORTANCE OF MARITIME ECONOMICS.

In particular the person will:

1. Monitor fisheries offending detecting
2. Monitor unregulated fishing detecting
3. Monitor misreporting catch detecting
4. Monitor fisheries surveillance reporting
5. Monitor fisheries weather threat reporting
6. Monitor fisheries oceanography threat reporting
7. Monitor fisheries sea survival reporting
8. Monitor oceanography and fisheries compliance surveillance
9. Monitor fisheries vessel compliance monitoring
10. Monitor berthing compliance monitoring
11. Monitor fisheries navigability protection
12. Monitor fisheries vessel traffic protection surveillance
13. Monitor seaworthy vessel outfit surveillance
14. Perform OFS supervisory function

OCEANOGRAPHY AND FISHERIES SURVEILLANCE (OFS)

LEVEL 4

OFS SUPERINTENDANT

AN OFS SUPERINTENDANT IS DESIGNATED TO ADMINISTRATE OFS SURVEILLANCE OPERATIONAL ACTIVITIES IN SUPPORTING FISHERIES ACTIVITIES MANAGEMENT, SUSTAINABLE PROTECTION OF ECOSYSTEM PRODUCTIVITY FOR CURENT AND FUTURE GENERATION. INCUMBENTS DUTIES AND RESPONSIBILITIES SHALL BE EMBEDDED WITH THE RESPONSIBILITY TO CONSERVE ENDANGERED MARINE SPECIES, OCEANOGRAPHY, AND THE IMPORTANCE OF MARITIME ECONOMICS.

In particular the person will:

1. Administer fisheries offending detecting
2. Administer unregulated fishing detecting
3. Administer misreporting catch detecting
4. Administer fisheries surveillance reporting
5. Administer fisheries weather threat reporting
6. Administer fisheries oceanography threat reporting
7. Administer fisheries sea survival reporting
8. Administer oceanography and fisheries compliance surveillance
9. Administer fisheries vessel compliance Administering
10. Administer berthing compliance Administering
11. Administer fisheries navigability protection
12. Administer fisheries vessel traffic protection surveillance
13. Administer seaworthy vessel outfit surveillance
14. Perform OFS administrative functions

OCEANOGRAPHY AND FISHERIES SURVEILLANCE (OFS)

LEVEL 5

MANAGER OFS

AN OFS MANAGER IS DESIGNATED TO MANAGE THE OCEANOGRAPGY AND FISHERIES SURVEILLANCE FUNCTIONS. THE DUTIES AND RESPONSIBILITY COVERING OVERSEEING AND ALERTING ALL RELATED PARTIES ON OCEANOGRAPHY AND FISHERIES ACTIVITIES FOR ECONOMICS, SAFETY, SECURITY AND ENFORCVEMENT PURPOSES.

In particular the person will:

1. Manage fisheries offending detecting
2. Manage unregulated fishing detecting
3. Manage misreporting catch detecting
4. Manage fisheries surveillance reporting
5. Manage fisheries weather threat reporting
6. Manage fisheries oceanography threat reporting
7. Manage fisheries sea survival reporting
8. Manage oceanography and fisheries compliance surveillance
9. Manage fisheries vessel compliance
10. Manage berthing compliance
11. Manage fisheries navigability protection
12. Manage fisheries vessel traffic protection surveillance
13. Manage seaworthy vessel outfit surveillance
14. Perform OFS departmental management functions

OCEANOGRAPHY AND FISHERIES SURVEILLANCE (OFS)

LEVEL 6

OFS CONTROLLER

AN OFS CONTROLLER IS DESIGNATED TO CONTROL OVERALL OFS SURVEILLANCE OPERATIONAL MANAGEMENT IN SUPPORTING FISHERIES ACTIVITIES MANAGEMENT, SUSTAINABLE PROTECTION OF ECHOSYSTEM PRODUCTIVITY FOR CURENT AND FUTURE GENERATION. INCUMBENTS DUTIES AND RESPONSIBILITIES SHALL BE EMBEDED WITH THE RESPONSIBILITY TO CONSERVE ENDANGERED MARINE SPECIES, OCEANOGRAPHY, AND THE IMPORTANCE OF MARITIME ECONOMICS.

In particular the person will:

1. Control fisheries offending detecting management
2. Control oceanography and fisheries compliance surveillance management
3. Control fisheries surveillance reporting management
4. Control fisheries navigability protection management
5. Control oceanography and fisheries threat SAR coordination
6. Control fisheries surveillance coordination
7. Control oceanography and fisheries station administrative function
8. Control surveillance station management
9. Control surveillance station monitoring
10. Control surveillance station operations management
11. Control threat and rescue coordination
12. Control surveillance station reporting
13. Perform management control functions

OCEANOGRAPHY AND FISHERIES SURVEILLANCE (OFS)

LEVEL 7

OFS STARTEGIST

AN OFS STRATEGIST IS DESIGNATED TO LEAD OVERALL OFS SURVEILLANCE MANAGEMENT IN SUPPORTING FISHERIES ACTIVITIES MANAGEMENT, SUSTAINABLE PROTECTION OF ECOSYSTEM PRODUCTIVITY FOR CURENT AND FUTURE GENERATION. INCUMBENTS DUTIES AND RESPONSIBILITIES SHALL BE EMBEDDED WITH THE RESPONSIBILITY TO CONSERVE ENDANGERED MARINE SPECIES, OCEANOGRAPHY, AND THE IMPORTANCE OF MARITIME ECONOMICS.

In particular the person will:

1. Lead oceanography and fisheries compliance surveillance
2. Lead fisheries vessel traffic protection surveillance
3. Lead seaworthy vessel outfit surveillance
4. Carry out overall OFS organizational performance management
5. Develop OFS operational strategies
6. Develop OFS financial strategies
7. Generate product/service innovation
8. Lead fisheries navigability protection management
9. Generate technology innovation
10. Lead OFS strategies implementation

HEALTH, SAFETY AND ENVIRONMENTAL SURVEILLANCE (HSES)

LEVEL 1

HSES JUNIOR VTS OPERATOR

A HSES JUNIOR VTS OPERATOR IS DESIGNATED TO ASSIST HSES SURVEILLANCE SUPPORT FUNCTION. THE MAIN DUTIES AND RESPONSIBILITIES SHALL INCLUDE OPERATIONAL ASSISTANCE, USING RADIO COMMUNICATION EQUIPMENT, RADAR AND COMPUTER. AND OTHER RELATED EQUIPMENT IN ACCORDANCE WITH ORGANISATIONAL REQUIREMENTS AND SPECIFICATIONS.

In particular the person will:

1. Provide radio communication operation assistance
2. Carry out HSES systems worksite housekeeping
3. Carry out HSES filing systems
4. Carry out HSES statistical data compilation
5. Provide Navtex message broadcasting assistance
6. Prepare HSES operation training facilities

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HEALTH, SAFETY AND ENVIRONMENTAL SURVEILLANCE (HSES)

LEVEL 2

HSES VTS OPERATOR

A HSES VTS OPERATOR IS DESIGNATED TO CARRY OUT HSES SURVEILLANCE SUPPORT FUNCTION. THE MAIN DUTIES AND RESPONSIBILITIES SHALL INCLUDE OPERATIONAL ASSISTANCE, USING RADIO COMMUNICATION EQUIPMENT, RADAR AND COMPUTER. AND OTHER RELATED EQUIPMENT IN ACCORDANCE WITH ORGANISATIONAL REQUIREMENTS AND SPECIFICATIONS.

In particular the person will:

1. Check radio communication operation assistance
2. Check HSES systems worksite housekeeping
3. Check HSES filing systems
4. Check HSES statistical data compilation
5. Provide Navtex message broadcasting assistance
6. Prepare HSES operation training facilities
7. Check HSES training facilities preparation
8. Handle radio emergency call

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HEALTH, SAFETY AND ENVIRONMENTAL SURVEILLANCE (HSES)

LEVEL 3

HSES VTS SUPERVISOR

A HSES VTS SUPERVISOR IS DESIGNATED TO PERFORM HSES SURVEILLANCE SUPERVISORY FUNCTION. THE MAIN DUTIES AND RESPONSIBILITIES SHALL INCLUDE OPERATIONAL ASSISTANCE, USING RADIO COMMUNICATION EQUIPMENT, RADAR AND COMPUTER. AND OTHER RELATED EQUIPMENT IN ACCORDANCE WITH ORGANISATIONAL REQUIREMENTS AND SPECIFICATIONS.

In particular the person will:

1. Monitor radio communication operation assistance
2. Monitor HSES systems worksite housekeeping
3. Monitor HSES filing systems
4. Monitor HSES statistical data compilation
5. Monitor Navtex message broadcasting assistance
6. Monitor HSES operation training facilities preparation
7. Monitor HSES training facilities preparation
8. Perform safety message broadcasting
9. Monitor radio emergency call handling
10. Perform supervisory function

HEALTH, SAFETY AND ENVIRONMENTAL SURVEILLANCE (HSES)

LEVEL 4

HSES VTS SUPERINTENDANT

A HSES VTS SUPERINTENDANT IS DESIGNATED TO CARRY OUT HSES SURVEILLANCE ADMINISTRATIVE FUNCTION. THE MAIN DUTIES AND RESPONSIBILITIES SHALL INCLUDE OPERATIONAL ADMINISTRATION, USING RADIO COMMUNICATION EQUIPMENT, RADAR AND COMPUTER. AND OTHER RELATED EQUIPMENT IN ACCORDANCE WITH ORGANISATIONAL REQUIREMENTS AND SPECIFICATIONS.

In particular the person will:

1. Administer radio communication operation
2. Administer HSES systems worksite housekeeping
3. Administer HSES filing systems
4. Administer HSES statistical data compilation
5. Administer Navtex message broadcasting
6. Administer HSES operation training facilities preparation
7. Administer HSES training facilities preparation
8. Administer radio emergency call handling
9. Perform HSES departmental administrative function

HEALTH, SAFETY AND ENVIRONMENTAL SURVEILLANCE (HSES)

LEVEL 5

HSES VTS MANAGER

A HSES VTS MANAGER IS DESIGNATED TO MANAGE HSES SURVEILLANCE OPERATION FUNCTION. THE MAIN DUTIES AND RESPONSIBILITIES SHALL INCLUDE OPERATIONAL MANAGEMENT, USING RADIO COMMUNICATION EQUIPMENT, RADAR AND COMPUTER. AND OTHER RELATED EQUIPMENT IN ACCORDANCE WITH ORGANISATIONAL REQUIREMENTS AND SPECIFICATIONS.

In particular the person will:

1. Manage radio communication operation assistance
2. Manage HSES systems worksite housekeeping
3. Manage HSES filing systems
4. Manage HSES statistical data compilation
5. Manage Navtex message broadcasting
6. Manage HSES operation training facilities
7. Manage HSES training facilities preparation
8. Manage radio emergency call handling

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HEALTH, SAFETY AND ENVIRONMENTAL SURVEILLANCE (HSES)

LEVEL 6

HSES VTS CONTROLLER

A HSES VT CONTROLLER IS DESIGNATED TO ADMINISTRATE HSES SURVEILLANCE OPERATION FUNCTION. THE MAIN DUTIES AND RESPONSIBILITIES SHALL INCLUDE OPERATIONAL MANAGEMENT, USING RADIO COMMUNICATION EQUIPMENT, RADAR AND COMPUTER. AND OTHER RELATED EQUIPMENT IN ACCORDANCE WITH ORGANISATIONAL REQUIREMENTS AND SPECIFICATIONS.

In particular the person will:

1. Control HSES operational performance
2. Control HSES service quality management
3. Control radio communication equipments operation
4. Perform international liaison function
5. Review ships accident investigation
6. Review HSES strategic plan implementation
7. Perform HSES internal audit activities
8. Perform departmental control function

HEALTH, SAFETY AND ENVIRONMENTAL SURVEILLANCE (HSES)

LEVEL 7

HSES VTS STARTEGIST

A HSES VTS STRATEGIST IS DESIGNATED TO LEAD OVERALL HSES VTS BUSINESS OPERATION INACCORDANCE WITH SPECIFIED ORGANIZATIONAL REQUIREMENTS. THE POSITION IS RESPONSIBLE FOR THE OVERALL ORGANISATIONAL RESULTS COVERING THE FUNCTIONAL AND PROFITABILITY MEASURES.

In particular the person will:

1. Carry out overall HSES organisational performance management.
2. Develop strategic HSES business plan
3. Develop HSES marketing strategies
4. Develop HSES operational strategies
5. Develop HSES financial strategies
6. Generate product/service innovation
7. Lead technology innovation initiative
8. Lead HSES strategies implementation

OFFSHORE SURVEILLANCE (OSS)

LEVEL 1

OSS JUNIOR OPERATOR

AN OSS VTS JUNIOR OPERATOR IS DESIGNATED TO CARRY OUT GENERAL DUTIES IN SUPPORTING OSS ACTIVITIES WITHIN OFFSHORE DECLARED AREA.

In particular the person will:

1. Provide radio communication operation assistance
2. Carry out HSES systems worksite housekeeping.
3. Carry out HSES filing systems.
4. Carry out HSES statistical data compilation
5. Provide Navtex message broadcasting assistance
6. Prepare HSES operation training facilities.

OFFSHORE SURVEILLANCE (OSS)

LEVEL 2

OSS OPERATOR

AN OSS VTS OPERATOR IS DESIGNATED TO CARRY OUT SURVEILLANCE SUPPORT FUNCTION. THE MAIN DUTIES AND RESPONSIBILITIES SHALL INCLUDE OPERATIONAL ASSISTANCE, USING RADIO COMMUNICATION EQUIPMENT, RADAR AND COMPUTER. AND OTHER RELATED EQUIPMENT IN ACCORDANCE WITH ORGANISATIONAL REQUIREMENTS AND SPECIFICATIONS.

In particular the person will:

1. Operate radio communication systems
2. Carry out offshore statistical data compilation
3. Prepare offshore operation training facilities
4. Perform offshore illegal intrusion surveillance activities
5. Perform offshore oil spill protection activities
6. Perform offshore sea environment surveillance activities
7. Perform offshore installation protection activities
8. Perform offshore logistics surveillance activities
9. Perform offshore search & rescue coordination
10. Perform offshore sub-sea installation surveillance activities
11. Perform post offshore surveillance activities

OFFSHORE SURVEILLANCE (OSS)

LEVEL 3

OSS SUPERVISOR

AN OSS VTS SUPERVISOR IS DESIGNATED TO CARRY OUT SURVEILLANCE SUPERVISORY FUNCTION. THE MAIN DUTIES AND RESPONSIBILITIES SHALL INCLUDE OPERATIONAL ASSISTANCE, USING RADIO COMMUNICATION EQUIPMENT, RADAR AND COMPUTER. AND OTHER RELATED EQUIPMENT IN ACCORDANCE WITH ORGANISATIONAL REQUIREMENTS AND SPECIFICATIONS.

In particular the person will:

1. Monitor radio communication system operation
2. Monitor offshore systems worksite housekeeping
3. Monitor offshore filing systems
4. Monitor offshore statistical data compilation
5. Monitor offshore operation training facilities preparation
6. Monitor offshore illegal intrusion surveillance activities
7. Monitor offshore oil spill protection activities
8. Monitor offshore sea environment surveillance activities
9. Monitor offshore installation protection activities
10. Monitor offshore logistics surveillance activities
11. Monitor offshore search and rescue coordination
12. Monitor offshore sub-sea installation surveillance activities
13. Monitor post offshore surveillance activities
14. Perform supervisory function

OFFSHORE SURVEILLANCE (OSS)

LEVEL 4

OSS SUPERINTENDANT

AN OSS VTS SUPERINTENDANT IS DESIGNATED TO CARRY OUT SURVEILLANCE ADMINISTRATIVE FUNCTION. THE MAIN DUTIES AND RESPONSIBILITIES SHALL INCLUDE OPERATIONAL ASSISTENCE, USING RADIO COMMUNICATION EQUIPMENT, RADAR AND COMPUTER. AND OTHER RELATED EQUIPMENT IN ACCORDANCE WITH ORGANISATIONAL REQUIREMENTS AND SPECIFICATIONS. AN OSS VTS SUPERINTENDANT IS DESIGNATED TO ADMINISTRATE OSS OPERATIONAL ACTIVITIES WITHIN OFFSHORE DECLARED AREA.

In particular the person will:

1. Administrate radio communication system operation.
2. Analyze offshore statistical data
3. Administer offshore operation training program
4. Administer offshore illegal intrusion surveillance activities
5. Administer offshore oil spill protection activities
6. Administer offshore sea environment surveillance activities
7. Administer offshore installation protection activities
8. Administer offshore logistics surveillance activities
9. Administer offshore search and rescue coordination
10. Administer offshore sub-sea installation surveillance activities
11. Administer post offshore surveillance activities
12. Perform sectional administration

OFFSHORE SURVEILLANCE (OSS)

LEVEL 5

OSS MANAGER

AN OSS VTS MANAGER IS DESIGNATED TO MANAGE SURVEILLANCE MANAGEMENT FUNCTION. THE MAIN DUTIES AND RESPONSIBILITIES SHALL INCLUDE OPERATIONAL ASSISTANCE, USING RADIO COMMUNICATION EQUIPMENT, RADAR AND COMPUTER. AND OTHER RELATED EQUIPMENT IN ACCORDANCE WITH ORGANISATIONAL REQUIREMENTS AND SPECIFICATIONS.

In particular the person will:

1. Manage radio communication system operation
2. Analyze offshore statistical data
3. Manage offshore operation training program
4. Manage offshore illegal intrusion surveillance activities
5. Manage offshore oil spill protection activities
6. Manage offshore sea environment surveillance activities
7. Manage offshore installation protection activities
8. Manage offshore logistics surveillance activities
9. Manage offshore search and rescue coordination
10. Manage offshore sub-sea installation surveillance activities
11. Manage post offshore surveillance activities
12. Perform departmental management

OFFSHORE SURVEILLANCE (OSS)

LEVEL 6

OSS CONTROLLER

AN OSS VTS CONTROLLER IS DESIGNATED TO CARRY OUT SURVEILLANCE MANAGEMENT CONRTROL FUNCTION. THE MAIN DUTIES AND RESPONSIBILITIES SHALL INCLUDE OPERATIONAL ASSISTENCE, USING RADIO COMMUNICATION EQUIPMENT, RADAR AND COMPUTER. AND OTHER RELATED EQUIPMENT IN ACCORDANCE WITH ORGANISATIONAL REQUIREMENTS AND SPECIFICATIONS. AN OSS CONTROLLER IS DESIGNATED TO CONTROLL OSS OPERATIONAL ACTIVITIES WITHIN OFFSHORE DECLARED AREA.

In particular the person will:

1. Control radio communication system operation
2. Review offshore statistical data analysis
3. Review offshore operation training program
4. Control offshore illegal intrusion surveillance activities
5. Control offshore oil spill protection activities
6. Control offshore sea environment surveillance activities
7. Control offshore installation protection activities
8. Control offshore logistics surveillance activities
9. Control offshore search and rescue coordination
10. Control offshore sub-sea installation surveillance activities
11. Control post offshore surveillance activities
12. Perform departmental management

OFFSHORE SURVEILLANCE (OSS)

LEVEL 7

OSS STRATEGIST

AN OSS VTS STRATEGIST IS DESIGNATED TO LEAD OSS SURVEILLANCE FUNCTION. THE MAIN DUTIES AND RESPONSIBILITIES SHALL INCLUDE OPERATIONAL ASSISTANCE, USING RADIO COMMUNICATION EQUIPMENT, RADAR AND COMPUTER. AND OTHER RELATED EQUIPMENT IN ACCORDANCE WITH ORGANISATIONAL REQUIREMENTS AND SPECIFICATIONS.

In particular the person will:

1. Lead overall OSS organizational performance management.
2. Develop strategic OSS business plan
3. Develop OSS operational strategies
4. Develop OSS financial strategies
5. Generate OSS technology innovation
6. Lead OSS strategies implementation
7. Review OSS periodical report analysis
8. Lead OSS distress rescue activities
9. Lead offshore rescue activities
10. Review internal audit report analysis result
11. Lead OSS safety promotional program
12. Lead radio communication system operation
13. Review offshore statistical data analysis
14. Lead offshore operation training function
15. Lead offshore illegal intrusion surveillance activities
16. Lead offshore oil spill protection activities

17. Lead offshore sea environment surveillance activities
18. Lead offshore installation protection activities
19. Lead offshore logistics surveillance activities
20. Lead offshore search and rescue coordination

PORT SURVEILLANCE (PS)

LEVEL 1

VTS JUNIOR OPERATOR PS

A PORT SURVEILLANCE VTS JUNIOR OPERATOR IS DESIGNATED TO CARRY OUT GENERAL WORKS AND ASSIST SUPPORT FUNCTION OF PORT SURVEILLANCE OPERATION. DITIES AND RESPONSIBILITIES SHALL COVER PS OPERATION WITHIN PORT WATER ZONE AND WHARF AREA USING RADAR AND RADIO COMMUNICATION EQUIPMENTS, COMPUTER AND ALL OTHER EQUIPMENT SPECIFIED BY THE ORGANISATION IN ACCORDANCE WITH ORGANISATION REQUIREMENTS.

In particular the person will:

1. Receive vessels calls
2. Receive unit administrative call
3. Record vessel calls
4. Check vessel pre-arrival notification
5. Check vessel arrival list
6. Check vessel departure list
7. Check vessel within terminal shifting list
8. Check vessel pilot exemption
9. Carry out screen vessel tagging
10. Carry out inter terminal communication

PORT SURVEILLANCE (PS)

LEVEL 2

VTS OPERATOR

A PORT SURVEILLANCE VTS OPERATOR IS DESIGNATED TO CARRY OUT OPERATIONAL SUPPORT FUNCTION OF PORT SURVEILLANCE OPERATION. DUTIES AND RESPONSIBILITIES SHALL COVER PS OPERATION WITHIN PORT WATER ZONE AND WHARF AREA USING RADAR & RADIO COMMUNICATION EQUIPMENTS, COMPUTER AND ALL OTHER EQUIPMENT SPECIFIED BY THE ORGANIZATION IN ACCORDANCE WITH ORGANIZATION REQUIREMENTS.

In particular the person will:

1. Determine real vessel identification
2. Carry out vessel database entry
3. Provide vessel traffic guide
4. Receive malfunction sail support aid report.
5. Disseminate standard vessel information
6. Monitor vessel movement.

PORT SURVEILLANCE (PS)

LEVEL 3

VTS SUPERVISOR PS

A PORT SURVEILLANCE VTS SUPERVISOR IS DESIGNATED TO CARRY OUT SUPERVISORY FUNCTION OF PORT SURVEILLANCE OPERATION. DUTIES AND RESPONSIBILITIES SHALL COVER PS OPERATION WITHIN PORT WATER ZONE AND WHARF AREA USING RADAR AND RADIO COMMUNICATION EQUIPMENTS, COMPUTER AND ALL OTHER EQUIPMENT SPECIFIED BY THE ORGANISATION IN ACCORDANCE WITH ORGANISATION REQUIREMENTS.

In particular the person will:

1. Monitor VTS operators
2. Inspect surveillance equipments
3. Facilitate vessel pilot
4. Facilitate vessel personnel
5. Provide vessel departure guide
6. Provide vessel piloting guide
7. Inspect bunker vessel
8. Prepare monthly operation report
9. Perform unit supervision function

PORT SURVEILLANCE (PS)

LEVEL 4

VTS SUPERINTENDANT

A PORT SURVEILLANCE VTS SUPERINTENDANT IS DESIGNATED TO CARRY OUT ADMINISTRATIVE FUNCTION OF PORT SURVEILLANCE OPERATION. DUTIES AND RESPONSIBILITIES SHALL COVER PS OPERATION WITHIN PORT WATER ZONE AND WHARF AREA USING RADAR & RADIO COMMUNICATION EQUIPMENTS, COMPUTER AND ALL OTHER EQUIPMENT SPECIFIED BY THE ORGANISATION IN ACCORDANCE WITH ORGANISATION REQUIREMENTS.

In particular the person will:

1. Administer port surveillance activities
2. Check vessel movement monitoring activities
3. Monitor piloting activities
4. Provide surveillance irregularity report
5. Administer external authority coordination
6. Administer private jetty inspection
7. Administer bunker vessel motoring activities checking
8. Perform departmental administrate function

PORT SURVEILLANCE (PS)

LEVEL 5

VTS MANAGER

A PORT SURVEILLANCE VTS MANAGER IS DESIGNATED TO PERFORM MANAGEMENT FUNCTION OF PORT SURVEILLANCE OPERATION. DUTIES AND RESPONSIBILITIES SHALL COVER PS OPERATION WITHIN PORT WATER ZONE AND WHARF AREA USING RADAR AND RADIO COMMUNICATION EQUIPMENTS, COMPUTER AND ALL OTHER EQUIPMENT SPECIFIED BY THE ORGANISATION IN ACCORDANCE WITH ORGANISATION REQUIREMENTS.

In particular the person will:

1. Manage port surveillance departmental functions
2. Manage port vessel traffic safety support functions
3. Monitor vessel navigation aid equipments
4. Manage harboring route depth guidelines compliance
5. Manage external agency coordination
6. Carry out pilot committee secretarial function
7. Manage departmental strategic plan implementation

PORT SURVEILLANCE (PS)

LEVEL 6

VTS CONTROLLER

A PORT SURVEILLANCE VTS CONTROLLER IS DESIGNATED TO CARRY OUT MANAGEMENT CONTROL FUNCTION OF PORT SURVEILLANCE OPERATION. DUTIES AND RESPONSIBILITIES SHALL COVER PS OPERATION WITHIN PORT WATER ZONE AND WHARF AREA USING RADAR AND RADIO COMMUNICATION EQUIPMENTS, COMPUTER AND ALL OTHER EQUIPMENT SPECIFIED BY THE ORGANIZATION IN ACCORDANCE WITH ORGANISATION REQUIREMENTS.

In particular the person will:

1. Lead port surveillance departmental functions
2. Lead port vessel traffic safety support functions
3. Develop strategic operational plan
4. Endorse harboring route depth guidelines compliance
5. Lead external agency coordination
6. Strategise departmental performance improvement

SEARCH AND RESCUE SURVEILLANCE (SARS)

LEVEL 2

SARS OPERATOR

A SARS OPERATOR IS DESIGNATED TO CARRY OUT SEARCH AND RESCUE FUNCTIONS WITHIN NATIONAL SAR ZONE USING SPECIFIED EQUIPMENT AND PROCEDURE INCLUDING GLOBAL MARITIME DISTRESS SAFETY SIGNAL (GMDSS), RADIO EQUIPMENT AND OTHER EQUIPMENTS ACCORDING TO ORGANISATIONAL SPECIFICATION AND REQUIREMENTS.

In particular the person will:

1. Operate GMDSS equipment
2. Carry out emergency call verification
3. Perform equipment safety procedures
4. Handle emergency calls
5. Perform incident record procedure
6. Carry out third party SAR communication
7. Carry out distress emergency responding activities
8. Carry out distress rescue activities
9. Carry out oceanographic rescue activities
10. Carry out fisheries rescue activities
11. Carry out maritime border and coastal rescue activities
12. Carry out offshore and sea rescue activities

SEARCH AND RESCUE SURVEILLANCE (SARS)

LEVEL 3

SARS SUPERVISOR

A SARS SUPERVISOR IS DESIGNATED TO SUPERVISE SEARCH AND RESCUE FUNCTIONS WITHIN NATIONAL SAR ZONE USING SPECIFIED EQUIPMENT AND PROCEDURE INCLUDING GLOBAL MARITIME DISTRESS SAFETY SIGNAL (GMDSS), RADIO EQUIPMENT AND OTHER EQUIPMENTS ACCORDING TO ORGANISATIONAL SPECIFICATION AND REQUIREMENTS.

In particular the person will:

1. Monitor GMDSS equipment operation
2. Monitor emergency call verification
3. Inspect equipment safety procedures performance
4. Monitor emergency calls handling
5. Monitor surveillance activities in MRCC
6. Monitor distress emergency responding activities
7. Monitor port distress rescue activities
8. Monitor oceanographic rescue activities
9. Monitor fisheries rescue activities
10. Monitor maritime border and coastal rescue activities
11. Monitor offshore and sea rescue activities
12. Perform supervisory function

SEARCH AND RESCUE SURVEILLANCE (SARS)

LEVEL 4

SARS SUPERINTENDANT

A SARS SUPERINTENDANT IS DESIGNATED TO ADMINISTRATE SEARCH AND RESCUE FUNCTIONS WITHIN NATIONAL SAR ZONE USING SPECIFIED EQUIPMENT AND PROCEDURE INCLUDING GLOBAL MARITIME DISTRESS SAFETY SIGNAL (GMDSS), RADIO EQUIPMENT AND OTHER EQUIPMENTS ACCORDING TO ORGANISATIONAL SPECIFICATION AND REQUIREMENTS.

In particular the person will:

1. Administer distress rescue activities
2. Administer distress emergency responding activities
3. Administer oceanographic rescue activities
4. Administer fisheries rescue activities
5. Administer port distress rescue activities
6. Administer maritime border and coastal rescue activities
7. Administer offshore and sea rescue activities
8. Administer surveillance activities in MRCC/MRSC
9. Conduct MRCC/MRSC team training
10. Prepare SARS periodical report
11. Perform logistic administration
12. Arrange SARS external safety promotional program

SEARCH AND RESCUE SURVEILLANCE (SARS)

LEVEL 5

SARS MANAGER

A SARS MANAGER IS DESIGNATED TO MANAGE SEARCH AND RESCUE FUNCTIONS WITHIN NATIONAL SAR ZONE USING SPECIFIED EQUIPMENT AND PROCEDURE INCLUDING GLOBAL MARITIME DISTRESS SAFETY SIGNAL (GMDSS), RADIO EQUIPMENT AND OTHER EQUIPMENTS ACCORDING TO ORGANISATIONAL SPECIFICATION AND REQUIREMENTS.

In particular the person will:

1. Conduct emergency condition analysis
2. Perform SAR Mission coordination (SMC)
3. Perform SAR periodical report analysis
4. Manage SAR team training
5. Develop strategic SAR operational plan
6. Perform public relation function
7. Manage oceanographic rescue activities
8. Manage fisheries rescue activities
9. Manage port distress rescue activities
10. Manage maritime border and coastal rescue activities
11. Manage offshore and sea rescue activities
12. Manage surveillance activities in MRCC
13. Manage SARS external safety promotional program
14. Prepare SAR operational budget
15. Manage departmental functions

SEARCH AND RESCUE SURVEILLANCE (SARS)

LEVEL 6

SARS CONTROLLER

A SARS CONTROLLER IS DESIGNATED TO CONTROL SEARCH AND RESCUE MANAGEMENT FUNCTIONS WITHIN NATIONAL SAR ZONE USING SPECIFIED EQUIPMENT AND PROCEDURE INCLUDING GLOBAL MARITIME DISTRESS SAFETY SIGNAL (GMDSS), RADIO EQUIPMENT AND OTHER EQUIPMENTS ACCORDING TO ORGANISATIONAL SPECIFICATION AND REQUIREMENTS.

In particular the person will:

1. Review emergency condition analysis.
2. Review SAR mission coordination (SMC) activities
3. Review SAR periodical report analysis
4. Review SAR team training
5. Review strategic SAR operational plan
6. Monitor public relation function.
7. Control oceanographic rescue activities management
8. Control fisheries rescue activities management
9. Control port distress rescue activities management
10. Control maritime border and coastal rescue activities management
11. Control offshore and sea rescue activities management
12. Control surveillance activities management in MRCC
13. Conduct SAR internal Audit
14. Formulate human capital development strategies.
15. Manage SARS external safety promotional program.
16. Perform liaison function
17. Review SAR operational budget

SEARCH AND RESCUE SURVEILLANCE (SARS)

LEVEL 7

SARS STRATEGIST

A SARS STRATEGIST IS DESIGNATED TO LEAD THE OVERALL MANAGEMENT OF SEARCH AND RESCUE FUNCTION WITHIN NATIONAL SAR ZONE USING SPECIFIED EQUIPMENT AND PROCEDURE INCLUDING GLOBAL MARITIME DISTRESS SAFETY SIGNAL (GMDSS), RADIO EQUIPMENT AND OTHER EQUIPMENTS ACCORDING TO ORGANISATIONAL SPECIFICATION AND REQUIREMENTS.

In particular the person will:

1. Carry out overall SARS organizational performance management.
2. Develop strategic SARS business plan.
3. Develop SARS marketing strategies.
4. Develop SARS operational strategies
5. Develop SARS financial strategies
6. Generate SARS technology innovation.
7. Lead SARS strategies implementation.
8. Lead SAR Mission coordination (SMC) activities
9. Review SAR periodical report analysis
10. Lead oceanographic rescue activities
11. Lead fisheries rescue activities
12. Lead port distress rescue activities
13. Lead maritime border & coastal rescue activities
14. Lead offshore & sea rescue activities.
15. Lead surveillance activities in MRCC
16. Perform SAR internal Audit report analysis
17. Lead SARS external safety promotional program.
18. Lead international relation function

JOB DEFINITION FOR TECHNICAL POSITIONS

NATIONAL SECURITY
INTEGRATED SURVEILLANCE (NaSIS)

LEVEL 1

NASIS JUNIOR TECHNICIAN

A NaSIS JUNIOR TECHNICIAN IS DESIGNATED TO CARRY OUT GENERAL TECHNICAL WORKS IN SUPPORTING THE NaSIS OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER LEVEL ONE MAINTENANCE ASSISTANCE INVOLVING RADIO COMMUNICATION AND RADAR EQUIPTMENTS.

In particular the person will:

1. Carry out NaSIS surveillance equipment inspection support activities
2. Carry out NaSIS surveillance software serviceability inspection support activities
3. Carry out NaSIS surveillance control centre room equipment inspection support activities
4. Carry out NaSIS surveillance facilities housekeeping
5. Back up NaSIS surveillance data
6. Carry out NaSIS technical office administrative support activities
7. Carry out NaSIS maintenance database entry

NATIONAL SECURITY
INTEGRATED SURVEILLANCE (NaSIS)

LEVEL 2

NASIS TECHNICIAN

A NaSIS TECHNICIAN IS DESIGNATED TO CARRY OUT TECHNICAL WORKS IN SUPPORTING THE NaSIS OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER ALL TECHNICAL INSTALLATION, INSPECTION AND MAINTENANCE OF ALL FACILITIES AND EQUIPMENTS IN RELATION TO NaSIS SERVICES IN ACCORDANCE TO ORGANISATIONAL REQUIREMENTS.

In particular the person will:

1. Check NaSIS surveillance equipment status
2. Check NaSIS surveillance software status
3. Verify NaSIS mechanical and power system operation
4. Carry out NaSIS antenna system functional checks
5. Carry out NaSIS radar transmitter functional checks
6. Carry out NaSIS radar processor and display functional checks
7. Carry out generator, UPS functional checks
8. Carry out NaSIS outdoor equipments corrosion inspection
9. Carry out earth resistance system inspection
10. Prepare NaSIS equipment failure notification record
11. Carry out NaSIS corrective maintenance request
12. Diagnose NaSIS failed equipment symptom
13. Prepares NaSIS non conformance report
14. Provide first level NaSIS support and maintenance

NATIONAL SECURITY
INTEGRATED SURVEILLANCE (NaSIS)
LEVEL 3
NASIS TECHNICAL SUPERVISOR

A NaSIS TECHNICAL SUPERVISOR IS DESIGNATED TO CARRY OUT TECHNICAL SUPERVISORY WORKS IN SUPPORTING THE NaSIS OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER ALL TECHNICAL INSTALLATION, INSPECTION AND MAINTENANCE OF ALL FACILITIES AND EQUIPMENTS SUPERVISION WORKS IN RELATION TO NaSIS SERVICES IN ACCORDANCE WITH ORGANISATIONAL REQUIREMENTS.

In particular the person will:

1. Monitor NaSIS surveillance equipment status check
2. Monitor NaSIS surveillance software status check
3. Monitor NaSIS antenna system functional checks
4. Monitor NaSIS radar transmitter functional checks
5. Monitor NaSIS radar processor and display functional checks
6. Monitor NaSIS generator, UPS functional checks
7. Monitor NaSIS outdoor equipments corrosion inspection.
8. Monitor earth resistance system inspection
9. Monitor NaSIS corrective maintenance activities
10. Monitor NaSIS equipment symptom diagnostic activities
11. Analyze NaSIS non conformance report
12. Monitor NaSIS first level support and maintenance
13. Verify NaSIS surveillance sub-system failures
14. Troubleshoot equipment failure
15. Perform NaSIS technical supervisory function

NATIONAL SECURITY
INTEGRATED SURVEILLANCE (NaSIS)
LEVEL 4

NASIS ASISTANT TECHNICAL MANAGER

A NaSIS ASISTANT TECHNICAL MANAGER IS DESIGNATED TO PERFORM TECHNICAL ADMINISTRATIVE FUNCTIONS IN SUPPORTING THE NaSIS OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER ALL TECHNICAL INSTALLATION, INSPECTION AND MAINTENANCE ADMINISTRATION OF ALL FACILITIES AND EQUIPMENTS IN RELATION TO NaSIS SERVICES IN ACCORDANCE TO ORGANIZATIONAL REQUIREMENTS.

In particular the person will:

1. Administer NaSIS surveillance facilities inspection
2. Administer NaSIS preventive maintenance program
3. Administer NaSIS corrective maintenance program
4. Verify NaSIS sensors calibration
5. Verify NaSIS inventory control
6. Verify NaSIS material requisition
7. Perform NaSIS database configuration
8. Performs NaSIS testing and commissioning activities
9. Administer NaSIS surveillance repair centre
10. Conduct NaSIS surveillance technology users training
11. Perform NaSIS contract administration
12. Perform departmental administrative function

NATIONAL SECURITY
INTEGRATED SURVEILLANCE (NaSIS)
LEVEL 5

NASIS TECHNICAL MANAGER

A NaSIS TECHNICAL MANAGER IS DESIGNATED TO PERFORM TECHNICAL MANAGERIAL FUNCTIONS IN SUPPORTING THE NaSIS OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER ALL TECHNICAL INSTALLATION, INSPECTION AND MAINTENANCE MANAGEMENT OF ALL FACILITIES AND EQUIPMENTS IN RELATION TO NaSIS SERVICES IN ACCORDANCE TO ORGANISATIONAL REQUIREMENTS.

In particular the person will:

1. Manage NaSIS surveillance facilities inspection
2. Manage NaSIS preventive maintenance program
3. Manage NaSIS corrective maintenance program
4. Verify NaSIS sensors calibration
5. Perform NaSIS procurement management
6. Review NaSIS operational procedures
7. Manage NaSIS surveillance repair centre
8. Monitor NaSIS testing and commissioning activities
9. Analyze maintenance performance reports
10. Manage departmental performance
11. Manage departmental strategic plan implementation
12. Manage NaSIS surveillance technology users training

NATIONAL SECURITY
INTEGRATED SURVEILLANCE (NaSIS)
LEVEL 6

NASIS SENIOR TECHNICAL MANAGER

A NaSIS SENIOR TECHNICAL MANAGER IS DESIGNATED TO PERFORM SENIOR MANAGEMENT FUNCTIONS IN SUPPORTING THE NaSIS OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER ALL TECHNICAL INSTALLATION, INSPECTION AND MAINTENANCE MANAGEMENT OF ALL FACILITIES AND EQUIPMENTS IN RELATION TO NaSIS SERVICES IN ACCORDANCE TO ORGANISATIONAL REQUIREMENTS.

In particular the person will:

1. Control NaSIS surveillance facilities inspection.
2. Control NaSIS preventive maintenance program.
3. Control NaSIS corrective maintenance program.
4. Control NaSIS procurement management
5. Prepare NaSIS surveillance technical operational policies
6. Control NaSIS surveillance repair centre
7. Manage NaSIS testing and commissioning activities
8. Develop departmental performance improvement program.
9. Monitor NaSIS contract administration
10. Strategize staff training.
11. Control departmental strategic plan implementation.
12. Handles licensing and certification affairs.
13. Perform external liaison activities.
14. Promote NaSIS surveillance service innovation.
15. Perform NaSIS customer needs analysis
16. Perform NaSIS specialist technical services

NATIONAL SECURITY

INTEGRATED SURVEILLANCE (NaSIS)

LEVEL 7

NASIS TECHNOLOGIST

A NaSIS TECHNOLOGIST IS DESIGNATED TO LEAD NaSIS TECHNICAL SUPPORT FUNCTION. HE/SHE SHALL BE RESPONSIBLE FOR THE ACHIEVEMENT OF THE OVERALL GOALS AND OBJECTIVES OF THE DEPARTMENT.

In particular the person will:

1. Review NaSIS surveillance technical operational policies
2. Monitor NaSIS specialist technical services
3. Develop NaSIS operational (technical) cost effective improvement strategies
4. Review departmental performance improvement program.
5. Endorse NaSIS contract administration
6. Review staff training strategy
7. Develop departmental strategic plan
8. Lead NaSIS departmental strategic plan implementation
9. Review NaSIS departmental internal audit
10. Analyze NaSIS customer needs analysis
11. Monitor licensing and certification affairs
12. Lead external liaison activities
13. Lead NaSIS surveillance service innovation strategy implementation
14. Initiate NaSIS surveillance technological innovation

MARITIME BORDER AND COASTAL SURVEILLANCE (MBCS)

LEVEL 1

MBCS JUNIOR TECHNICIAN

A MBCS JUNIOR TECHNICIAN IS DESIGNATED TO CARRY OUT GENERAL WORKS IN ASSISTING HARDWARE INSTALLATION, SOFTWARE INSTALLATION AND SURVEILLANCE SYSTEM COMMISSIONING OF MBCS.

In particular the person will:

1. Carry out support duties of MBCS surveillance hardware installation
2. Carry out support duties of integrated radar unit installation
3. Carry out support duties of automatic identification system installation
4. Carry out support duties of voice communication infrastructure installation
5. Carry out support duties of long rang EO/IR cameras installation
6. Carry out support duties of encrypted transponders installation
7. Carry out support duties of sea state detector installation
8. Carry out support duties of sea traffic extractor trackers installation

MARITIME BORDER AND COASTAL SURVEILLANCE (MBCS)

LEVEL 2

MBCS TECHNICIAN

A MBCS TECHNICIAN IS DESIGNATED TO PERFORM MBCS SURVEILLANCE HARDWARE INSTALLATION, SOFTWARE INSTALLATION, SURVEILLANCE SYSTEM TEST, OPTIMISATION, COMMISSIONING AND CORRECTIVE MAINTENANCE.

In particular the person will:

1. Carry out MBCS surveillance hardware installation
2. Carry out MBCS surveillance system software
3. Carry out MBCS system test
4. Carry out MBCS system optimisation
5. Carry out MBCS system commissioning
6. Carry out MBCS troubleshooting
7. Carry out MBCS system corrective maintenance

MARITIME BORDER AND COASTAL SURVEILLANCE (MBCS)

LEVEL 3

MBCS TECHNICAL SUPERVISOR

A MBCS TECHNICAL SUPERVISOR IS DESIGNATED TO SUPERVISE MBCS SURVEILLANCE HARDWARE INSTALLATION, SOFTWARE INSTALLATION, SURVEILLANCE SYSTEM TEST, OPTIMISATION, COMMISSIONING AND CORRECTIVE MAINTENANCE.

In particular the person will:

1. Monitor MBCS surveillance hardware installation
2. Monitor MBCS surveillance system software
3. Monitor MBCS system test
4. Monitor MBCS system optimisation
5. Monitor MBCS system commissioning
6. Monitor MBCS troubleshooting
7. Monitor MBCS system corrective maintenance
8. Monitor MBCS administrative functions
9. Perform supervisory function

MARITIME BORDER AND COASTAL SURVEILLANCE (MBCS)

LEVEL 4

MBCS ASSISTANT TECHNICAL MANAGER

A MBCS ASSISTANT TECHNICAL MANAGER IS DESIGNATED TO ADMINISTRATE TECHNICAL SUPPORT FUNCTION OF MBCS SURVEILLANCE. THE DUTIES AND RESPONSIBILITIES SHALL COVER MBCS SURVEILLANCE HARDWARE INSTALLATION, SOFTWARE INSTALLATION, SURVEILLANCE SYSTEM TEST, OPTIMIZATION, COMMISSIONING, CORRECTIVE MAINTENANCE AND OTHER RELATED ACTIVITIES.

In particular the person will:

1. Manage MBCS hardware installation
2. Manage MBCS system software installation
3. Manage MBCS system test
4. Manage MBCS system optimisation
5. Manage MBCS system commissioning
6. Manage MBCS troubleshooting
7. Manage MBCS system corrective maintenance
8. Handle MBCS system R&D
9. Develop MBCS intelligence and situation awareness planning
10. Manage MBCS site survey
11. Perform MBCS administrative functions
12. Manage MBCS report
13. Manage contract agreement

MARITIME BORDER AND COASTAL SURVEILLANCE (MBCS)

LEVEL 5

MBCS TECHNICAL MANAGER

A MBCS TECHNICAL MANAGER IS DESIGNATED TO MANAGE TECHNICAL SUPPORT FUNCTION OF MBCS SURVEILLANCE. THE DUTIES AND RESPONSIBILITIES SHALL COVER MBCS SURVEILLANCE HARDWARE INSTALLATION, SOFTWARE INSTALLATION, SURVEILLANCE SYSTEM TEST, OPTIMIZATION, COMMISSIONING, CORRECTIVE MAINTENANCE AND OTHER RELATED ACTIVITIES.

.

In particular the person will:

1. Monitor MBCS surveillance hardware installation
2. Monitor MBCS surveillance system software
3. Monitor MBCS system test
4. Monitor MBCS system optimisation
5. Monitor MBCS system commissioning
6. Monitor MBCS troubleshooting
7. Monitor MBCS system corrective maintenance
8. Monitor MBCS administrative function
9. Perform supervisory function

MARITIME BORDER AND COASTAL SURVEILLANCE (MBCS)

LEVEL 6

MBCS SENIOR TECHNICAL MANAGER

A MBCS SENIOR TECHNICAL MANAGER IS DESIGNATED TO DIRECT TECHNICAL SUPPORT FUNCTION OF MBCS SURVEILLANCE. THE DUTIES AND RESPONSIBILITIES SHALL COVER MBCS SURVEILLANCE HARDWARE INSTALLATION, SOFTWARE INSTALLATION, SURVEILLANCE SYSTEM TEST, OPTIMISATION, COMMISSIONING, CORRECTIVE MAINTENANCE AND OTHER RELATED ACTIVITIES.

In particular the person will:

1. Direct MBCS hardware installation
2. Direct MBCS system software installation
3. Direct MBCS troubleshooting
4. Direct MBCS system corrective maintenance
5. Direct MBCS system R&D
6. Direct MBCS intelligence and situation awareness planning
7. Direct MBCS site survey
8. Direct MBCS report evaluation
9. Direct MBCS budget development
10. Direct MBCS technical procurement

MARITIME BORDER ANDCOASTAL SURVEILLANCE (MBCS)

LEVEL 7

MBCS TECHNOLOGIST

A MBCS TECHNOLOGIST IS DESIGNATED TO LEAD TECHNICAL SUPPORT FUNCTION OF MBCS SURVEILLANCE. THE POSITION IS RESPONSIBLE TO ACHIEVE THE OVERALL GOALS OF THE FUNCTION IN A WAY TO REACH THE VISION OF THE ORGANIZATION. THE DUTIES AND RESPONSIBILITIES SHALL COVER FORMULATION OF STRATEGIC PLAN FOR THE MANAGEMENT AND OPERATION AND GENERATING NEW METHODOLOGY AND OR THECHNOLOGY IN RELATION TO MBCS.

In particular the person will:

1. Formulate overall MBCS technical support strategic plan
2. Lead MBCS maintenance improvement program
3. Perform MBCS Research and Development
4. Lead operational performance
5. Lead MBCS procurement
6. Perform MBCS managerial coaching

OCEANOGRAPHY AND FISHERIES SURVEILLANCE (OFS)

LEVEL 1

OFS JUNIOR TECHNICIAN

AN OFS JUNIOR TECHNICIAN IS DESIGNATED TO CARRY OUT GENERAL TECHNICAL WORKS IN SUPPORTING THE OFS OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER LEVEL ONE MAINTENANCE ASSISTANCE INVOLVING RADIO COMMUNICATION, RADAR EQUIPTMENTS AND OTHER RELATED TECHNICAL ASSISTANCE.

In particular the person will:

1. Carry out OFS surveillance equipment inspection support activities
2. Carry out OFS surveillance software serviceability inspection support activities
3. Carry out OFS surveillance control centre room equipment inspection support activities
4. Carry out OFS surveillance facilities housekeeping
5. Back up O*F*S surveillance data
6. Carry out OFS technical office administrative support activities
7. Carry out OFS maintenance database entry

OCEANOGRAPHY AND FISHERIES SURVEILLANCE (OFS)

LEVEL 2

OFS TECHNICIAN

AN OFS TECHNICIAN IS DESIGNATED TO CARRY OUT TECHNICAL WORKS IN SUPPORTING THE OFS OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER LEVEL ONE MAINTENANCE INVOLVING RADIO COMMUNICATION, RADAR EQUIPTMENTS AND OTHER RELATED TECHNICAL SUPPORT.

In particular the person will:

1. Check OFS surveillance equipment status
2. Check OFS surveillance software status
3. Verify OFS mechanical and power system operation
4. Carry out control centre equipment inspection activities
5. Carry out earth resistance system inspection
6. Carry out OFS corrective maintenance request
7. Provide first level OFS support and maintenance

OCEANOGRAPHY AND FISHERIES SURVEILLANCE (OFS) LEVEL 3

OFS TECHNICAL SUPERVISOR

AN OFS TECHNICAL SUPERVISOR IS DESIGNATED PERFORM TECHNICAL SUPERVISORY FUNCTION IN SUPPORTING THE OFS OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER ALL TECHNICAL INSTALLATION, INSPECTION AND MAINTENANCE ALL FACILITIES AND EQUIPMENTS RELATED TO OFS SURVEILLANCE IN ACCORDANCE TO ORGANIZATION REQUIREMENTS.

In particular the person will:

1. Monitor OFS surveillance equipment status check
2. Monitor OFS surveillance software status check
3. Monitor OFS antenna system functional checks
4. Monitor OFS radar transmitter functional checks
5. Monitor OFS radar processor and display functional checks
6. Monitor OFS generator, UPS functional checks
7. Monitor OFS outdoor equipments corrosion inspection
8. Monitor earth resistance system inspection
9. Monitor OFS corrective maintenance activities
10. Monitor OFS equipment symptom diagnostic activities
11. Analyze OFS non conformance report
12. Monitor OFS first level support and maintenance
13. Perform OFS inventory control
14. Perform OFS technical supervisory function

OCEANOGRAPHY AND FISHERIES SURVEILLANCE (OFS) LEVEL 4

OFS ASISTANT TECHNICAL MANAGER

AN OFS ASISTANT TECHNICAL MANAGER IS DESIGNATED TO PERFORM TECHNICAL ADMINISTRATIVE FUNCTIONS IN SUPPORTING THE OFS OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER ALL TECHNICAL INSTALLATION, INSPECTION AND MAINTENANCE ADMINISTRATION OF ALL FACILITIES AND EQUIPMENTS IN RELATION TO OFS SERVICES IN ACCORDANCE TO ORGANIZATIONAL REQUIREMENTS.

In particular the person will:

1. Administer OFS surveillance facilities inspection.
2. Administer OFS preventive maintenance program.
3. Administer OFS corrective maintenance program.
4. Verify OFS sensors calibration
5. Verify OFS inventory control
6. Verify OFS technical material requisition.
7. Verify OFS conformance testing
8. Perform OFS surveillance equipment configuration
9. Perform OFS surveillance software configuration
10. Perform OFS computer networks configuration
11. Perform OFS communication network configuration
12. Performs OFS testing and commissioning activities
13. Perform OFS contract administration
14. Perform departmental administrative functions

OCEANOGRAPHY AND FISHERIES SURVEILLANCE (OFS) LEVEL 5

OFS TECHNICAL MANAGER

AN OFS TECHNICALMANAGER ISDESIGNATED TO PERFORM TECHNICAL MANAGERIAL FUNCTIONS IN SUPPORTING THE OFS OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER ALL TECHNICAL INSTALLATION, INSPECTION AND MAINTENANCE MANAGEMENT OF ALL FACILITIES AND EQUIPMENTS IN RELATION TO OFS SERVICES IN ACCORDANCE TO ORGANIZATIONAL REQUIREMENTS.

In particular the person will:

1. Manage OFS surveillance facilities inspection
2. Manage OFS preventive maintenance program
3. Manage OFS corrective maintenance program
4. Verify OFS sensors calibration
5. Perform OFS procurement management
6. Monitor OFS surveillance equipment configuration
7. Monitor OFS testing and commissioning activities
8. Manage staff training
9. Perform departmental managerial functions

OCEANOGRAPHY AND FISHERIES SURVEILLANCE (OFS)

LEVEL 6

OFS SENIOR TECHNICAL MANAGER

AN OFS SENIOR TECHNICAL MANAGER IS DESIGNATED TO PERFORM MANAGEMENT CONTROL FUNCTIONS IN SUPPORTING THE OFS OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER ALL MANAGEMENT CONTROL OF ALL TECHNICAL INSTALLATION, INSPECTION AND MAINTENANCE MANAGEMENT CONTROL OF ALL FACILITIES AND EQUIPMENTS IN RELATION TO OFS SERVICES IN ACCORDANCE TO ORGANISATIONAL REQUIREMENTS.

In particular the person will:

1. Control OFS surveillance facilities inspection
2. Control OFS preventive maintenance program
3. Control OFS corrective maintenance program
4. Control OFS procurement management
5. Prepare OFS surveillance technical operational policies
6. Manage OFS testing and commissioning activities
7. Monitor OFS contract administration
8. Strategize staff training
9. Control departmental strategic plan implementation.
10. Perform departmental audit
11. Promote OFS surveillance service innovation
12. Perform OFS customer needs analysis
13. Perform OFS specialist technical services

OCEANOGRAPHY AND FISHERIES SURVEILLANCE (OFS)

LEVEL 7

OFS TECHNOLOGIST

AN OFS TECHNOLOGIST IS DESIGNATED TO LEAD OFS OVERALL TECHNICAL SUPPORT FUNCTION. HE/SHE SHALL BE RESPONSIBLE FOR THE ACHIEVEMENT OF THE OVERALL GOALS OF THE DEPARTMENT.

In particular the person will:

1. Review OFS surveillance technical operational policies
2. Monitor OFS specialist technical services
3. Develop OFS operational (technical) cost effective improvement strategies
4. Develop departmental strategic plan
5. Lead OFS departmental strategic plan implementation
6. Review OFS departmental internal audit
7. Analyze OFS customer needs analysis
8. Lead external liaison activities.

HEALTH, SAFETY AND ENVIRONMENT SURVEILLANCE (HSES) LEVEL 1

HSES JUNIOR TECHNICIAN

A HSES JUNIOR TECHNICIAN IS DESIGNATED TO CARRY OUT GENERAL TECHNICAL WORK IN TECHNICAL SUPPORT FUNCTION OF HSES SERVICES. THE DUTIES AND RESPONSIBILITIES INCLUDE SUPPORTING THE OPERATION OF RADIO COMMUNICATION AND RADAR EQUIPMENTS MAINTENANCE IN ACCORDANCE WITH THE DIRECTION GIVEN BY THE OPERATION MANAGEMENT.

In particular the person will:

1. Carry out HSES technical worksite housekeeping activities
2. Collect HSES technical maintenance requisitions
3. Prepare HSES training facilities
4. Carry out maintenance filing systems
5. Carry out HSES systems technical maintenance general assistance
6. Carry out HSES systems technical installation general assistance

HEALTH, SAFETY AND ENVIRONMENT SURVEILLANCE (HSES)

LEVEL 2

HSES TECHNICIAN

AN HSES TECHNICIAN IS DESIGNATED TO CARRY OUT TECHNICAL WORKS IN SUPPORTING THE HSES OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER LEVEL ONE MAINTENANCE INVOLVING RADIO COMMUNICATION, RADAR EQUIPMENTS AND OTHER RELATED TECHNICAL SUPPORT.

In particular the person will:

1. Install HSES radio communication terminal
2. Maintain HSES radio communication terminal
3. Carry out HSES communication technical troubleshooting
4. Conduct HSES systems usage training
5. Carry out HSES equipment component control system
6. Monitor HSES technical worksite housekeeping activities

HEALTH, SAFETY AND ENVIRONMENTAL SURVEILLANCE (HSES)

LEVEL 3

HSES TECHNICAL SUPERVISOR

AN HSES TECHNICAL SUPERVISOR IS DESIGNATED TO CARRY OUT TECHNICAL WORKS IN SUPPORTING THE HSES OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER LEVEL ONE MAINTENANCE INVOLVING RADIO COMMUNICATION, RADAR EQUIPTMENTS AND OTHER RELATED TECHNICAL SUPPORT.

In particular the person will:

1. Carry out unit supervisory functions
2. Carry out HSES equipment and infrastructure component inventory control
3. Monitor maintenance implementation program
4. Provide system designs review support activities
5. Carry out corrective maintenance systems
6. Carry out preventive maintenance systems
7. Carry out unit performance improvement program

HEALTH, SAFETY AND ENVIRONMENTAL SURVEILLANCE (HSES)

LEVEL 4

HSES ASSISTANT TECHNICAL MANAGER

AN HSES ASSISTANT TECHNICAL MANAGER IS DESIGNATED TO ADMINISTRATE TECHNICAL WORKS IN SUPPORTING THE HSES OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER MAINTENANCE MANAGEMENT INVOLVING RADIO COMMUNICATION, RADAR EQUIPMENTS AND OTHER RELATED TECHNICAL SUPPORT.

In particular the person will:

1. Maintain HSES equipment and infrastructure component inventory
2. Maintain Point-to-Point Microwave system
3. Carry out troubleshoot HSES equipments and installations
4. Monitor HSES system operation performance
5. Assist radio and radar infrastructure projects coordination
6. Carry out HSES technical team training

HEALTH, SAFETY AND ENVIRONMENTAL SURVEILLANCE (HSES)

LEVEL 5

HSES TECHNICAL MANAGER

AN HSES TECHNICAL MANAGER IS DESIGNATED TO MANAGE TECHNICAL WORKS IN SUPPORTING THE HSES OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER MAINTENANCE MANAGEMENT INVOLVING RADIO COMMUNICATION, RADAR EQUIPMENTS AND OTHER RELATED TECHNICAL SUPPORT.

In particular the person will:

1. Manage departmental performance improvement program
2. Design RF communication systems (to support voice, data, and video transport)
3. Manage HSES equipments and Infrastructure components inventory
4. Manage HSES preventive management systems implementation
5. Lead HSES technical trouble shooting team
6. Monitor HSES technical support performance
7. Ensure uninterrupted HSES communications systems
8. Perform managerial functions

HEALTH, SAFETY AND ENVIRONMENTAL SURVEILLANCE (HSES)

LEVEL 6

HSES SENIOR TECHNICAL MANAGER

AN HSES SENIOR TECHNICAL MANAGER IS DESIGNATED TO PERFORM MANAGEMENT CONTROL FUNCTIONS IN SUPPORTING THE HSES OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER ALL MANAGEMENT CONTROL OF ALL TECHNICAL INSTALLATION, INSPECTION AND MAINTENANCE MANAGEMENT CONTROL OF ALL FACILITIES AND EQUIPMENTS IN RELATION TO HSES SERVICES IN ACCORDANCE TO ORGANISATIONAL REQUIREMENTS.

In particular the person will:

1. Review HSES performance management system
2. Manage HSES maintenance program design
3. Manage HSES system diagnostic
4. Conduct technical committee meeting
5. Develop HSES systems
6. Cary out HSES installation commissioning

HEALTH, SAFETY AND ENVIRONMENTAL SURVEILLANCE (HSES)

LEVEL 7

HSES TECHNOLOGIST

A HSES TECHNOLOGIST IS DESIGNATED TO LEAD HSES OVERALL TECHNICAL SUPPORT FUNCTION. HE/SHE SHALL BE RESPONSIBLE FOR THE ACHIEVEMENT OF THE OVERALL GOALS OF THE DEPARTMENT.

In particular the person will:

1. Review HSES surveillance technical operational policies
2. Monitor HSES specialist technical services
3. Develop HSES operational (technical) cost effective improvement strategies
4. Develop departmental strategic plan
5. Lead HSES departmental strategic plan implementation.
6. Review HSES departmental internal audit
7. Analyze HSES customer needs analysis
8. Lead external liaison activities

OFFSHORE AND SEA SURVEILLANCE (OSS)

LEVEL 1

OSS JUNIOR TECHNICIAN

AN OSS JUNIOR TECHNICIAN IS DESIGNATED TO CARRY OUT GENERAL TECHNICAL WORK IN TECHNICAL SUPPORT FUNCTION OF OSS SERVICES. THE DUTIES AND RESPONSIBILITIES INCLUDE SUPPORTING THE OPERATION OF RADIO COMMUNICATION AND RADAR EQUIPTMENTS MAINTENANCE IN ACCORDANCE WITH THE DIRECTION GIVEN BY THE OPERATION MANAGEMENT.

In particular the person will:

1. Carry out OSS technical worksite housekeeping activities
2. Collect OSS technical maintenance requisitions
3. Prepare OSS training facilities
4. Carry out maintenance filing systems
5. Carry out OSS systems technical maintenance general assistance
6. Carry out OSS systems technical installation general assistance

OFFSHORE AND SEA SURVEILLANCE (OSS)

LEVEL 2

OSS TECHNICIAN

AN OSS TECHNICIAN IS DESIGNATED TO CARRY OUT TECHNICAL WORKS IN SUPPORTING THE OSS OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER LEVEL ONE MAINTENANCE INVOLVING RADIO COMMUNICATION, RADAR EQUIPMENTS AND OTHER RELATED TECHNICAL SUPPORT.

In particular the person will:

1. Check OSS surveillance equipment status
2. Check OSS surveillance software status
3. Verify OSS mechanical and power system operation
4. Carry out control centre equipment inspection activities
5. Carry out earth resistance system inspection
6. Carry out OSS corrective maintenance request
7. Provide first level OSS support and maintenance

OFFSHORE AND SEA SURVEILLANCE (OSS)

LEVEL 3

OSS TECHNICAL SUPERVISOR

AN OSS TECHNICAL SUPERVISOR IS DESIGNATED PERFORMS TECHNICAL SUPERVISORY FUNCTION IN SUPPORTING THE OSS OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER ALL TECHNICAL INSTALLATION, INSPECTION AND MAINTENANCE ALL FACILITIES AND EQUIPMENTS RELATED TO OSS SURVEILLANCE IN ACCORDANCE TO ORGANISATION REQUIREMENTS.

In particular the person will:

1. Monitor OSS surveillance equipment status check
2. Monitor OSS surveillance software status check
3. Monitor OSS antenna system functional checks
4. Monitor OSS radar transmitter functional checks
5. Monitor OSS radar processor & display functional checks
6. Monitor OSS generator, UPS functional checks
7. Monitor OSS outdoor equipments corrosion inspection
8. Monitor earth resistance system inspection
9. Monitor OSS corrective maintenance activities
10. Monitor OSS equipment symptom diagnostic activities
11. Analyze OSS non conformance report
12. Monitor OSS first level support and maintenance
13. Perform OSS inventory control
14. Perform OSS technical supervisory function

OFFSHORE AND SEA SURVEILLANCE (OSS)
LEVEL 4

OSS ASISTANT TECHNICAL MANAGER

AN OSS ASISTANT TECHNICAL MANAGER IS DESIGNATED TO PERFORM TECHNICAL ADMINISTRATIVE FUNCTIONS IN SUPPORTING THE OSS OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER ALL TECHNICAL INSTALLATION, INSPECTION AND MAINTENANCE ADMINISTRATION OF ALL FACILITIES AND EQUIPMENTS IN RELATION TO OSS SERVICES IN ACCORDANCE TO ORGANISATIONAL REQUIREMENTS.

In particular the person will:

1. Administer OSS surveillance facilities inspection
2. Administer OSS preventive maintenance program
3. Administer OSS corrective maintenance program
4. Verify OSS sensors calibration
5. Verify OSS inventory control
6. Verify OSS technical material requisition
7. Verify OSS conformance testing
8. Perform OSS surveillance equipment configuration
9. Perform OSS surveillance software configuration
10. Perform OSS computer networks configuration
11. Perform OSS communication network configuration
12. Performs OSS testing and commissioning activities
13. Perform OSS contract administration
14. Perform departmental administrative functions

OFFSHORE AND SEA SURVEILLANCE (OSS)

LEVEL 5

OSS TECHNICAL MANAGER

AN OSS TECHNICAL MANAGER IS DESIGNATED TO PERFORM TECHNICAL MANAGERIAL FUNCTIONS IN SUPPORTING THE OSS OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER ALL TECHNICAL INSTALLATION, INSPECTION AND MAINTENANCE MANAGEMENT OF ALL FACILITIES AND EQUIPMENTS IN RELATION TO OSS SERVICES IN ACCORDANCE TO ORGANISATIONAL REQUIREMENTS.

In particular the person will:

1. Manage OSS surveillance facilities inspection
2. Manage OSS preventive maintenance program
3. Manage OSS corrective maintenance program
4. Verify OSS sensors calibration
5. Perform OSS procurement management
6. Monitor OSS surveillance equipment configuration
7. Monitor OSS testing and commissioning activities
8. Manage staff training
9. Perform departmental managerial functions

OFFSHORE AND SEA SURVEILLANCE (OSS)

LEVEL 6

OSS SENIOR TECHNICAL MANAGER

AN OSS SENIOR TECHNICAL MANAGER IS DESIGNATED TO PERFORM MANAGEMENT CONTROL FUNCTIONS IN SUPPORTING THE OSS OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER ALL MANAGEMENT CONTROL OF ALL TECHNICAL INSTALLATION, INSPECTION AND MAINTENANCE MANAGEMENT CONTROL OF ALL FACILITIES AND EQUIPMENTS IN RELATION TO OSS SERVICES IN ACCORDANCE TO ORGANISATIONAL REQUIREMENTS.

In particular the person will:

1. Control OSS surveillance facilities inspection
2. Control OSS preventive maintenance program
3. Control OSS corrective maintenance program
4. Control OSS procurement management
5. Prepare OSS surveillance technical operational policies
6. Manage OSS testing and commissioning activities
7. Monitor OSS contract administration
8. Strategize staff training
9. Control departmental strategic plan implementation
10. Perform departmental audit
11. Promote OSS surveillance service innovation
12. Perform OSS customer needs analysis
13. Perform OSS specialist technical services

OFFSHORE AND SEA SURVEILLANCE (OSS)

LEVEL 7

OSS TECHNOLOGIST

AN OSS TECHNOLOGIST IS DESIGNATED TO LEAD OSS OVERALLTECHNICAL SUPPORT FUNCTION. HE/SHE SHALL BE RESPONSIBLE FOR THE ACHIEVEMENT OF THE OVERALL GOALS OF THE DEPARTMENT.

In particular the person will:

1. Review OSS surveillance technical operational policies
2. Monitor OSS specialist technical services
3. Develop OSS operational (technical) cost effective improvement strategies
4. Develop departmental strategic plan
5. Lead OSS departmental strategic plan implementation
6. Review OSS departmental internal audit
7. Analyze OSS customer needs analysis
8. Lead external liaison activities

PORT SURVEILLANCE (PS)

LEVEL 1

PS JUNIOR TECHNICIAN

A PS JUNIOR TECHNICIAN IS DESIGNATED TO CARRY OUT GENERAL TECHNICAL WORKS IN SUPPORTING THE PS OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER LEVEL ONE MAINTENANCE ASSISTANCE INVOLVING RADIO COMMUNICATION, RADAR EQUIPMENTS AND OTHER RELATED TECHNICAL ASSISTANCE.

In particular the person will:

1. Carry out PS surveillance equipment status checking assistance
2. Carry out PS surveillance software status checking assistance
3. Carry out PS power systems checking assistance
4. Carry out control PS centre and equipment room checking assistance
5. Provide backup PS surveillance data
6. Clean dust/stains radar screen/displays
7. Clean external equipment
8. Perform battery voltages inspection
9. Ensure generator fuel supply
10. Carry out generator, fuel tank oil leaks checking assistance
11. Carry out generator room maintenance inspection
12. Carry out cabling, inspection support activities
13. Record surveillance equipment and software status

PORT SURVEILLANCE (PS)

LEVEL 2

PS TECHNICIAN

A PS TECHNICIAN IS DESIGNATED TO CARRY OUT TECHNICAL WORKS IN SUPPORTING THE PS OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER LEVEL ONE MAINTENANCE INVOLVING RADIO COMMUNICATION, RADAR EQUIPMENTS AND OTHER RELATED TECHNICAL SUPPORT.

In particular the person will:

1. Check PS surveillance equipment status
2. Check PS surveillance software status
3. Verify PS mechanical and power system operation
4. Carry out control centre equipment inspection activities
5. Carry out earth resistance system inspection
6. Carry out PS corrective maintenance request
7. Provide first level PS support and maintenance

PORT SURVEILLANCE (PS)

LEVEL 3

PS TECHNICAL SUPERVISOR

A PS TECHNICAL SUPERVISOR IS DESIGNATED PERFORMS TECHNICAL SUPERVISORY FUNCTION IN SUPPORTING THE PS OPERATION. IN GENERAL THE DUTIES AND RESPONSIBILITIES SHALL COVER ALL TECHNICAL INSTALLATION, INSPECTION AND MAINTENANCE ALL FACILITIES AND EQUIPMENTS RELATED TO PS SURVEILLANCE IN ACCORDANCE TO ORGANISATION REQUIREMENTS.

In particular the person will:

1. Monitor PS surveillance equipment status check
2. Monitor PS surveillance software status check
3. Monitor PS antenna system functional checks
4. Monitor PS radar transmitter functional checks
5. Monitor PS radar processor and display functional checks
6. Monitor PS generator, UPS functional checks
7. Monitor PS outdoor equipments corrosion inspection
8. Monitor earth resistance system inspection
9. Monitor PS corrective maintenance activities
10. Monitor PS equipment symptom diagnostic activities
11. Analyze PS non conformance report
12. Monitor PS first level support and maintenance
13. Perform PS inventory control
14. Perform PS technical supervisory function

PORT SURVEILLANCE (PS)

LEVEL 4

PS ASSISTANT TECHNICAL MANAGER

A PORT ASSISTANT TECHNICAL MANAGER IS DESIGNATED TO ADMINISTRATE TECHNICAL SUPPORT FUNCTION OF PORT SURVEILLANCE IN ACCORDANCE WITH ORGANISATIONAL REQUIREMENTS.

In particular the person will:

1. Verify surveillance equipment status record
2. Verify surveillance software status record
3. Verify mechanical and power system operation
4. Verify functional checks on antenna system
5. Verify outdoor equipments corrosion inspection
6. Verify out earth resistance measurement
7. Verify equipment inspection
8. Analyze non conformance report
9. Verify first level technical support
10. Analyse surveillance equipment and software status report
11. Perform departmental administrative functions

PORT SURVEILLANCE (PS)

LEVEL 5

PS TECHNICAL MANAGER

PS TECHNICAL MANAGER IS DESIGNATED TO MANAGE TECHNICAL SUPPORT ACTIVITIES OF PORT SURVEILLANCE FUNCTIONS IN ACCORDANCE WITH ORGANISATIONAL REQUIREMENTS.

In particular the person will:

1. Analyse port surveillance technical operational report
2. Manage preventive maintenance program
3. Manage corrective maintenance program
4. Manage port surveillance technical inventory
5. Manage port surveillance technical support performance
6. Manage staff training function
7. Analyse non conformance report
8. Review surveillance equipment and software status report
9. Manage departmental strategic plan implementation
10. Perform departmental managerial functions

.

PORT SURVEILLANCE (PS)

LEVEL 6

PS SENIOR TECHNICAL MANAGER

PS SENIOR TECHNICAL MANAGER IS DESIGNATED TO LEAD TECHNICAL SUPPORT FUNCTION OF PORT SURVEILLANCE IN ACCORDANCE WITH ORGANISATIONAL REQUIREMENTS.

In particular the person will:

1. Develop port surveillance technical operation strategy
2. Lead PS preventive maintenance program
3. Lead corrective maintenance program
4. Lead port surveillance technical support performance
5. Lead staff training functions
6. Develop departmental strategic plan
7. Promote process innovation
8. Lead departmental strategic plan implementation

SEARCH AND RESCUE SURVEILLANCE (SARS)

LEVEL 2

SARS TECHNICIAN

A SARS TECHNICIAN IS DESIGNATED TO PERFORM INSTALLATION AND MAINTENANCE OF SARS EQUIPMENTS AT MRCC, MRSC, VESSELS AND ALL SAR RELATED SITES. HE/SHE WILL BE RESPONSIBLE TO PROVIDE TECHNICAL SUPPORT SERVICE IN SURVEILLANCE HARDWARE INSTALLATION, SOFTWARE INSTALLATION, SURVEILLANCE SYSTEM TEST, OPTIMIZATION, COMMISSIONING AND CORRECTIVE MAINTENANCE OF ALL SARS FACILITIES AND EQUIPMENTS.

In particular the person will:

1. Carry out level 1 GMDSS equipments maintenance
2. Carry out level 1 Radio equipments maintenance
3. Carry out SARS facilities and equipments preventive maintenance.
4. Carry out SARS equipments operational test
5. Prepare SARS equipment spare part requisition
6. Carry out SARS equipment spare part inspection
7. Prepare SARS corrective maintenance inspection report

SEARCH AND RESCUE SURVEILLANCE (SARS)

LEVEL 3

SARS TECHNICAL SUPERVISOR

A SAR TECHNICAL SUPERVISOR IS DESIGNATED TO SUPERVISE TECHNICAL SUPPORT FUNCTION ALL OF SARS FACILITIES, EQUIPMENTS AND INSTALLATION, MAINTENANCE AND ALL OTHER ACTIVITIES AT ALL SARS SITES IN ACCORDANCE WITH ORGANISATIONAL REAUIREMENTS.

In particular the person will:

1. Monitor level 1GMDSS equipments maintenance
2. Monitor level 1 Radio equipments maintenance
3. Monitor all SARS facilities and equipments preventive maintenance.
4. Monitor SARS equipments operational test
5. Perform SARS facilities and equipment inventory control
6. Monitor SARS equipment spare part inspection
7. Check SARS corrective maintenance inspection report
8. Prepare SARS preventive maintenance report
9. Carry out SARS maintenance statistical data compilation
10. Conduct SARS technical staff training
11. Perform technical supervisory function

SEARCH AND RESCUE SURVEILLANCE (SARS)

LEVEL 4

SARS TECHNICAL ASSISTANT MANAGER

A SARS TECHNICAL ASSISTANT MANAGER IS DESIGNATED TO ADMINISTRATE ALL SARS TECHNICAL SUPPORT FUNCTION IN ACCORDANCE WITH ORGANISATION REQUIREMENTS.

In particular the person will:

1. Administer SARS technical maintenance activities
2. Perform SARS facilities and equipment inventory administration
3. Prepare SARS maintenance performance report
4. Administrate SARS technical staff training
5. Perform SARS maintenance statistical data analysis
6. Administrate trouble shooting activities
7. Perform contract administration
8. Perform departmental administrative function

SEARCH AND RESCUE SURVEILLANCE (SARS)

LEVEL 5

SARS TECHNICAL MANAGER

A SARS TECHNICAL MANAGER IS DESIGNATED TO MANAGE ALL TECHNICAL SUPPORT SERVICES OF SARS FACILITIES, EQUIPMENTS AND INSTALLATION AT MRCC, MRSC, VESSELS AND ALL SAR RELATED SITES IN ACCORDANCE WITH ORGANISATION REQUIREMENTS.

In particular the person will:

1. Manage SARS technical maintenance activities
2. Perform SARS procurement management
3. Review SARS maintenance performance report
4. Prepare SARS departmental performance report
5. Manage SARS departmental staff training
6. Review SARS maintenance statistical data analysis
7. Manage contract administration
8. Manage SARS strategic plan implementation
9. Perform departmental managerial function

SEARCH AND RESCUE SURVEILLANCE (SARS)

LEVEL 6

SARS SENIOR TECHNICAL MANAGER

A SARS SENIOR TECHNICAL MANAGER IS DESIGNATED TO CONTROL ALL TECHNICAL SUPPORT SERVICES OF SARS FACILITIES, EQUIPMENTSAND INSTALLATION AT MRCC, MRSC, VESSELS AND ALL SAR RELATED SITES IN ACCORDANCE WITH ORGANISATION REQUIREMENTS.

In particular the person will:

1. Control SARS technical maintenance management activities
2. Monitor SARS procurement management
3. Evaluate SARS maintenance performance report
4. Control contract administration
5. Lead SARS strategic plan implementation
6. Perform SARS department internal audit
7. Control departmental managerial function

COASTAL AND MARITIME SURVEILLANCE (CMS)

LEVEL 8

CMS SCIENTIST

A CMS SCIENTIST IS DESIGNATED TO EXPLORE PRINCIPLES IN NATURE TO SOLVE PROBLEMS AND TO DESIGN NEW TECHNOLOGY. HE IS RESPONSIBLE TO APPLY APPLIED SCIENCES TRANSFERRED INTO A PHYSICAL ENVIRONMENT. HIS DUTIES INCLUDES PERFORMING RESEARCH TOWARD A MORE COMPREHENSIVE UNDERSTANDING OF NATURE, INCLUDING PHYSICAL, METHEMATICAL AND SOCIAL REALMS IN RELATION TO SURVEILANCE RELATED TECHNOLOGY.

In particular the person will:

1. Conduct scientific research
2. Conduct surveillance technology advisory session
3. Provide internal industrial consultancy services
4. Lead technological innovation program
5. Lead technological invention project
6. Conduct scientific survey
7. Explore new business opportunity
8. Conduct CMS management/engineering development program

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