Document Revisions

**IALA Guide LineNo. ####**

**On**

**Managing a VTS**

**Edition ---**

**------- 2019**

*AISM* Association Internationale de Signalisation Maritime ***IALA***

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Revisions to the IALA Document are to be noted in the table prior to the issue of a revised document.

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| **Date** | **Page / Section Revised** | **Requirement for Revision** |
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INTRODUCTION

The effectivity of the Vessel Traffic Service is enhanced by several guidelines published by IALA. Any system consists of several sub-parts which interact together in order to be a well-functioning system. The sub-parts which may be distinguished are hardware (equipment), software (procedures), liveware (people) and the environment in which the system operates.

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In numerous IALA documents (Recommendations, Guidelines, and Model Courses) it is recognized that the quality of a VTS is not only the result of these hardware and software requirements, but that well-trained staff is inevitable for a safe and effective operation of the VTS.

Training is required not only for operational VTSO’s, but equally important for management positions on an operational, tactical and even strategic management level of a VTS.

The management of a VTS requires specific competencies from the people involved. These competencies are not present by nature but are the result of training followed by sufficient experience and exposure to the key-elements of the VTS task.

This document is designed to help Vessel Traffic Services in the identification of the different management tasks of a VTS in order to set standards for these tasks and to assist Vessel Traffic Services in the training of their staff according to these standards.

In practice, management tasks may be divided among several employees and every VTS-authority will need the freedom to organise their VTS-centre in a way they consider best. Therefore it is not plausible to talk about functions, but this document strives to identify these tasks on an operational, tactical and strategic level. Each one of them have their own challenges and requiring different levels of experience and training.

Thorough research has been carried out eg by the Italian Coast Guard together with ………….several other parties resulting in th ‘Coast Guard Functional Secctoral Qualification Frameworks’. This document is a general document regarding the work of the Coast Guard but also contains valuable information regarding the competencies of a VTS. Some of this work will form the basis for this document.

Furthermore the input for this document is gathered by means of questionnaire which was specifically designed for this purpose and which is attached to this document in appendix A.

**PART A - OVERVIEW**

**1 OVERVIEW**

IALA recommends that training providers utilise accredited training courses as per IALA Guideline1014 on the Accreditation of VTS Training Courses. This Guide Line is meant to complement IALA pubblications on VTS personnel training

**2 PURPOSE OF GUIDE LINE**

The purpose of this guideline is to assist Competent Authorities, VTS Authorities, maritime training organisations and their teaching staff in the preparation of and the introduction of new training for the management of a VTS, providing guidance on the evaluation of the training need and details of the subject areas for knowledge and practical competence required.

**3 USE OF THE GUIDE LINE**

This guideline identifies the different management tasks which may be carried out at any management level (operational, tactical or strategic). Some of these task may be carried out by a VTSO who is off-duty, or during the VTSO’s watch at hours of low activity.

Some tasks may be allocated to “supervisors” “teamleaders” etc. (managers at a tactical level) - or even to a “manager”, “head of VTS” etc (managers on a strategic level).

As soon as someone carries out one of these tasks it should be investigated through this Guideline whether training is needed for this task.

The Guideline comprises 8 parts, each of which deals with a specific subject representing a requirement or function of the management of a VTS. Each part contains a subject framework stating its scope and aims, a subject outline and a detailed teaching syllabus.

....

And then:

One way forward might be....

Description of the various managerial tasks which may be occurred in at VTS (is a Questionaire needed?)

* Financial
* handling of personnel
* operational procedures
* cooperation with other stakeholders
* equipment
* etc

 Description of the various types of VTSs (which may influence / decide which managerial tasks will be handled by whom)

* Geographical area
* number of employees

 Description of the various factors which may influence / decide which / how much training is needed:

* prior knowledge/experience
* ..
* ..

**PART B- COURSE FRAMEWORK**

**1 INTRODUCTION**

The first written vision on management stems from Professor Fayol. In his original work *Administration industrielle et générale* he distinguishes five tasks of a manager, *prévoyance, organisation, commandement, coordination, controller*. These functions are translated as

1. Planning
2. Organizing
3. Staffing
4. Directing
5. Controlling

All of these tasks apply to the procedures, equipment, the environment and staff of the VTS.

The course framework will be directly derived from the qualification framework

**2 REQUIREMENTS FOR ENDORSEMENT**

This model course contains 8 elements which are awarded a certain amount of ECW (Estimated Course Workload). Each element refers to a task which may be part of the Manager’s position. It is up to the VTS authority which parts of the model course apply to the function of Manager as they organised it.

Endorsement as a VTS Manager is provided after the employee entered the course and completed all the course elements that refer to a task he executes. For a VTS manager endorsement a minimum of 30 ECW should be completed.

A number of management tasks can be carried out without thorough knowledge of VTS’s. However for a number of tasks VTS-knowledge is inevitable. These tasks cannot be carried out without having a VTSO-endorsement. Finally, some tasks require understanding of the VTS, but do not require a VTS endorsement. In table ….. you can find the listing of the tasks of VTS-management and the requirements.

• have achieved the International English Language Testing System (IELTS) level 6, or its equivalent;

• satisfy the Competent Authority by passing the appropriate assessment for the accredited course of Manager training or being in possession of requested prerequisites.

**3 COURSE INTAKE - LIMITATIONS**

Class sizes may be limited at the discretion of the Competent Authority in order to allow the instructor to give adequate attention to individual participants. In general it is recommended that a maximum of 10 students be the upper limit that a single instructor can be expected to train satisfactorily to the level of competence involved. Larger numbers may be admitted if extra staff and tutorial periods are provided to deal with participants on an individual basis.

During practical sessions and group activities there may be additional restraints on class size.

**4 TRAINING STAFF REQUIREMENTS**

All instructors and assessors should be appropriately qualified for the particular types and levels of training or assessment required for the course.

**PART C- COURSE MODULES**

Any learning process should be a dynamic mix of classroom activities and exercises in which the student plays a central role. However, adult learning should also evolve around the responsibility of learners for their own learning process. Each course should send a syllabus to the students before hand and make use of a work book, so that the student can prepare the classroom gatherings. Therefore each course has a Estimated Course Workload, which exceeds classroom activities. The complete course comprises 9 modules, each of which deals with a specific course module and subject representing a requirement or function of a VTS Manager, followed by simulated exercises and assessment intended to be representative of events and incidents likely to be experienced in a VTS Centre. The recommended duration in hours do not include the time necessary for examinations or tests of proficiency.

The course duration will take into account of prior learning assessment, considering the possession of equivalent training courses or qualifications already attended.

|  |  |  |  |
| --- | --- | --- | --- |
| **Module/Subjects/**  **Prerequisites** | **Tasks/competences (according to IALA V 103) and related**  **training needs** | **Purpose of training/education** | **ECW** |
| 1. Marine Organisations | * International / National / Local organistions. Roles and functions of maritime organistions. |  | 8 |
| 1. Operational |  |  |  |
| 1. Quality Management System | * Ensuring that the aims and objectives of the VTS are met at all times; * Ensuring that the standards set by the Competent/VTS Authority for operator qualifications and training are met; * Ensuring that the training and certification of VTS personnel are appropriate to the service types being provided; * Ensuring VTS quality standards are maintained; * Maintaining awareness of continuing development for the VTS centre(s); | Having the necessary knowledge on QMS in order to apply this methodology to VTS Centre. | 8 |
| 1. Team Resource Management applied to VTS | * Managing and co-ordinating human resources; | Provide the necessary training/knowledge for an efficient management of a VTS Centre, optimizing the resources available, making operations safer and more efficient, reduce stress levels and increase the efficiency |  |
| 1. VTS Management | * Ensuring that the aims and objectives of the VTS are met at all times; * Ensuring that all VTS operations follow current rules, regulations and legislation; * Planning and developing of emergency procedures as appropriate to the VTS area of responsibility; * Ensuring that all adopted standard operating procedures are reviewed and amended as required; * Managing and co-ordinating financial, technical and human resources; * Privacy legislation | Provide the necessary training for planning VTS Regulation, the VTS manual and managing all other information of interest to the VTS Centre, according to the standards provided by the management systems and taking account of the various port and areas to be audited / monitoring. | 16 |
| 1. Communication | * Developing and maintaining a good public information and relations program; * Ensuring compliance with evidentiary provisions in the event of an incident or accident occurring in the VTS area. * ensuring that all such events are properly recorded and readily available for examination by the Competent/VTS Authority. | Manage strategies to develop proper communication in crisis situation that has in the media and in public opinion the main target of comparison | 8 |
| 1. Risk management | * Planning and developing of emergency procedures as appropriate to the VTS area of responsibility; | Provide the instruments to analyse and calculate risks in a VTS Area in order to plan and develop VTS procedures | 8 |
| 1. Equipment | * Equipment |  | 4 |
| 1. Administrative procedures |  |  | 4 |
| 1. English language |  |  | 24 |

**MODULE 1 - QUALITY MANAGEMENT SYSTEM**

**1.1 INTRODUCTION**

Instructors for this module should be skilled in ISO 9000 and Quality Management System (QMS).

1.1.1 Background

A QMS provides an organization of the VTS Center activities.

It guarantees an efficient and effective organization of procedures and resources, and ensures a control of corrective actions which results in a process of continuous improvement .

**1.2 SUBJECT FRAMEWORK**

1.2.1 Purpose:

Provide the necessary training on the ISO 9001 and its eight core principles in order to apply this methodology to VTS Centre

1.2.2 Aims:

At the end of the module the course participant possesses knowledge of :

* ISO 9001 principles;
* The relationship between quality management and customer satisfaction;
* The terms commonly used in quality management;
* points under ISO 9001

and he is capable of:

* identify customer requirements and regulatory requirements;
* plan, organize and monitor the performances of the processes;
* identify and pursue areas of improvement.

|  |  |  |  |
| --- | --- | --- | --- |
| **Subject Area** | **Reccomended Competence Level** | **Recommended Hours** | |
| **Presentations/ Lectures / exercises** | **ECW** |
| ISO 9001 aim and its enforcement | 3 | 1 | 2 |
| 8 principles of quality | 3 | 1 | 2 |
| Process approach – Purpose, terms and definitions | 3 | 1 | 2 |
| Quality Management System | 3 | 1 | 2 |
| Management responsability (customer focus, quality policy, authority and communication, management review) | 3 | 1 | 2 |
| Resource management (human and matherial resources, work environment) | 3 | 1 | 2 |
| Product realisation (planning of product realisation, customer related process, planning and development, provision, production and service provision) | 3 | 1 | 2 |
| Measurement, analysis and improvement (internal control and external tools, non compliance, data analysis, improvement) | 3 | 1 | 2 |
|  |  |  |  |

**1.3 PRIOR LEARNING ASSESSMENT**

Candidate should be in possession of a certificated training course on Quality Management – ISO 9000 or equivalent, valid as a prerequisite.

**MODULE 2- TEAM RESOURCE MANAGEMENT**

**1.1 INTRODUCTION**

Instructors for this module should be skilled in CRM and VTS organisation.

1.1.1 Background

CRM has developed in the aeronautical area; the same principles are applied on bridge management onboard vessels. This way of organizing human and materials resources should be promoted also in a VTS context.

**1.2 SUBJECT FRAMEWORK**

1.2.1 Purpose:

provide the necessary training to optimize the resources available, making operations safer and more efficient, reduce stress levels and increase the efficiency of teamwork at the VTS centers.

1.2.2 Aims:

to acquire the frequent techniques included in the discipline of Crew Resource Management (CRM), born in aeronautical environment and then spread to all areas of work characterized by teamwork.

After completing this module the visitor acquires the following knowledge:

* greater awareness of teamwork and limitations that this entails working methodology;
* responsibility to direct a working group;

and it is capable of:

* apply the techniques of CRM within the VTS.

|  |  |  |  |
| --- | --- | --- | --- |
| **Subject Area** | **Reccomended Competence Level** | **Recommended Hours** | |
| **Presentations/ Lectures** | **ECW** |
| Analysis of the evolution of human resources and projection of future development | 4 | 2 |  |
| Basic concepts of CRM | 4 | 2 |  |
| Situational awareness in a VTS Center | 4 | 1 |  |
| Decision Making | 4 | 1 |  |
| Communication in a working team (internal – external) | 3 | 1 |  |
| Teamwork | 4 | 1 |  |
| Leadership | 4 | 1 |  |
| Understanding performance ahping factors, fatigue and stress | 4 | 1 |  |
| Ethical and legal issues in CRM and leadership actions | 4 | 1 |  |
| Simulation | 4 |  | 6 |

**1.2 PRIOR LEARNING ASSESSMENT**

The performance and duration of this module should vary considering Managers VTS background and prior qualifications

**MODULE 3 - VTS MANAGEMENT**

**1.1 INTRODUCTION**

Instructors for this module should be skilled in VTS organization, Operative procedures, planning activities in routine and emergencies situations, management of technical and material resources.

1.1.1 Background

The manager should have knowledge of the principles and practices of the particular VTS, the types of service provided and the overall structure and capabilities of the VTS organisation. This VTS knowledge may be gained through experience as a VTS Operator or VTS Supervisor and is the basis for a good management. Such experience would be particularly relevant where the role includes responsibilities for VTS contingency planning

**1.2 SUBJECT FRAMEWORK**

1.2.1 Purpose:

provide the necessary training for planning VTS Regulation, the VTS manual and managing all other information of interest to the VTS Center, according to the standards provided by the management systems and taking account of the various port and areas to be audited / monitoring.

1.2.2 Aims:

at the end of the module the visitor acquires the following knowledge:  
- structure of the documents relating to management systems;  
- differences between procedures, instructions, forms and manuals;  
and he is capable of:  
- prepare Standard Operating Procedures (SOPs) and Operating Instructions;  
- Develop operational procedures inside and outside of routine and emergency related to the VTS;

* Manage technical al material resources.

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| --- | --- | --- | --- |
| **Subject Area** | **Reccomended Competence Level** | **Recommended Hours** | |
| **Presentations/ Lectures** | **ECW** |
| Managing a team |  | 2 |  |
| Leadership theories |  | 2 |  |
| Structure of the documentation in management systems | 4 | 1 |  |
| Procedure, operating instructions, manuals | 4 | 1 |  |
| VTS regulation and user manual | 4 | 1 |  |
| List of radio signals | 4 | 1 |  |
| Implementation of standard operating instructions | 3 | 2 | 1 |
| Implementation of internal and external operating procedures, in routine and emergency situation | 4 | 3 | 4 |
| VTS tools and their management | 4 | 3 |  |

**1.3 PRIOR LEARNING ASSESSMENT**

The performance and duration of this module should vary considering Managers VTS background and prior qualifications

**MODULE 4 - COMMUNICATION IN EMERGENCY SITUATION**

**1.1 INTRODUCTION**

Instructors for this module should be skilled in communication in crisis situation.

1.1.1 Background

One of the main goal for an efficient management of an emergency situation is communication. A correct and effectiveness internal and external communication contribute to garantee a good management of crisis situations.

**1.2 SUBJECT FRAMEWORK**

1.2.1 Purpose:

Manage strategies to develop proper communication in crisis situation that has in the media and in public opinion the main targets of comparison.

1.2.2 Aim:

provide knowledge and develop integrated skills on theoretical and practical operational tools aimed at the management of crisis situations and emergencies from the point of view of psycho-social and communicational, inspired by new developments in human sciences.

Provide knowledge on resilience elements for a dinamic and positive reaction to difficult situations.

|  |  |  |  |
| --- | --- | --- | --- |
| **Subject Area** | **Reccomended Competence Level** | **Recommended Hours** | |
| **Presentations/ Lectures** | **ECW** |
| Crisis, emergencies and context | 4 | 3 |  |
| Comunication models and traditional communication | 4 | 5 |  |
| Digital communication | 4 | 3 |  |
| Crisis management, legal and organi zational approaches, media relations | 4 | 5 |  |
| Psychology : crisis, emergencies and their influence on communication processes | 3 | 3 | 2 |
| Methodologies and techniques for crisis and emergency management | 4 | 3 | 3 |

**1.3 PRIOR LEARNING ASSESSMENT**

The performance and duration of this module should vary considering Managers VTS background and prior qualifications.

**MODULE 5 – RISK MANAGEMENT TOOLBOX**

**1.1 INTRODUCTION**

Instructors for this module should be skilled in risk Management analysis in a VTS area and IALA risk management tools.

1.1.1 Background

IALA, through WWA organize a seminar on risk management toolbox. This training course should be useful to AtoN and VTS Managers.

**1.2 SUBJECT FRAMEWORK**

1.2.1 Purpose:

Provide theoretical and practical training necessary to have a satisfactory understanding of the three IALA risk management tools, IALA Waterway Risk Assessment Program (IWRAP Mk2); Port and Waterway Safety Assessment tool (PAWSA) and simulation.

1.2.2 Aim:

The course is intended to cover the knowledge required to understand the use of IALA risk management tools within their organization.

**SEE IALA MODEL COURSE**

**1.3 PRIOR LEARNING ASSESSMENT**

The participation to IALA seminar.

APPENDIX 1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Software  Procedures | Hardware  Equipment | | Environment | | Lifeware | |
| Operational | Monitor execution of procedures  Update manuals | Operate equipment  Gather safety data  Gather monitoring data  Unplanned maintenance  Update charts, information systems | | Execution of TRM-training (statistics, decision making, teamork, leadership, communication, stress an dfatigue etc)  Monitoring of green policy  Execution of dangerious cargo policy and pollution control policy  Execute security policy  Execute port strategies | | Administration of selection procedure  Plan and oversea training cycle  Oversee training results  Team management  Conflict management  Stress management  Scheduling and rostering  Ensure that training facilities are operational  Execution of agression protocol  Execution of drugs- and alcolhol policy  Execution of pricacy policy | |
| Tactical | Manage system for procedure changes  Manage administrative organisation  Evaluate and amend (emergency)-procedures  Implementation of IMO and IALA procedures  Implementation fo privacy policy into day to day operation | | Plan periodic maintenance  Evaluate safety data  Evaluate monitoring data | | Create a safety culture  Administrate incidents and accidents ??  Execute and evaluate liaison policy with other organisations  Present organisation on a tactical level  Implement green policy  Implement dangerous cargo policy and polution policy control policy  Evaluate and monitor security policy  Evaluate and monitor port strategies | | Review selection process  Appraisal of performance  Monitoring recurrent training  Organise meetings between VTSO’s  Develop system for stress management  Implement manpower planning system  Oversee TRM-training  Oversee training of examinors / mentors / instructors  Develop information for employees  Communicate and evaluate sick leave policy  Communicate and evaluate drugs and alcohol policy  Communicate and evaluate agression protocol | |
| Strategic | Develop communication and other procedures  Develop privacy policy  Develop, implement and re-apply quality system  Design safety system  Develop safety policy  Design emergency procedures  Oversee implementation of IMO and IALA procedures | | Purchase new equipment  Negotiate budget  Negotiate equipment mainatenance contracts with supplier in cooperation with puchasing department | | Ensure that hte airms and objectives of the VTS are met at all times  Involved in placement of equiptmentIn volved in setup of traffic planning system  Risk management analysis  Develop and maintain public relations programme  Enter contract with suppliers in coordination with purchase department  Develop, execute and evaluate liason policy with other organsiations  Present organisation on strategic level  Develop green policy  Develop dangerous cargo policy and polution controll policy  Develop security policy  Develop port management strategies | | Develop selection process  Choose system for manpower planning  Negotialte budget for manpower planning  Setup system for stress management  Develop, evaluate and adjust system for recurrent training  Develop sick leave policy  Develop agression policy  Develop alcohol and drugs policy | |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | VTS-endorsem | VTS familiarisation | VTS man. | Risk man. |  |
| S | E/S/H | Participate in cooperation with competent an VTS-authority with regard to development of VTS????? | X |  |  |  |  |
| T | L | Overseeing training of examinators / mentors / instructors | X |  |  |  |  |
| S | L | Develop, evaluate and adjust system for recurrent training *opmerking: indien ook inhoud training dan JA* | X |  |  |  |  |
| S | S | Develop communication and other procedures | X |  |  |  |  |
| S | S | Design emergency procedures | X |  |  |  |  |
| O | S | Monitor execution of procedures | X |  |  |  |  |
| S | H | Purchase new equipment | X |  |  |  |  |
| S | E | Ensuring that the aims and objectives of the VTS are met at all times |  | X |  |  |  |
|  |  | Involved in setup of traffic planning system |  | X |  |  |  |
| T | L | Appraisal of performance |  | X |  | X |  |
| S | L | Develop selection process |  | X |  | X |  |
| O | L | Team management |  | X |  | X |  |
| O | L | Conflict management |  | X |  | X |  |
| T | S | Evaluate and amend (emergency) procedures |  | X |  |  |  |
| S | S | Overseeing the development of procedures in accordance to IMO and IALA guidelines / rules |  | x |  |  |  |
| T | H | Involved in placement of equipment |  |  | X |  |  |
| O | L | Execution of aggression protocol |  |  | X |  |  |
| T | L | Overseeing TRM-training |  |  | X |  |  |
| T | S/H/L/E | Ensure that training facilities are operational |  |  | X |  |  |
| S | E | Risk management analysis |  |  | X |  |  |
| S | L | Development of aggression policy |  |  | X |  |  |
| O | L | Execution of TRM-training (statistics, decision making,teamwork, leadership, communication, stress and fatigue etc.) |  |  | X |  |  |
| T | L | Review selection process *opmerking: tenminste 1x in selectie team* |  |  | X |  |  |
| S | E | Enter contract with suppliers in coordination with purchase department |  |  | X |  |  |
| T | L | Organizes meeting between VTSO’s *opmerking: inhoudelijk?* |  |  | X |  |  |
| T | L | Creating a safety culture |  |  | X |  |  |
| S | S | Overseeing development of procedures in accordance to IMO and IALA guidelines / rules |  |  | X |  |  |
| S | E | Presentation of organization on an operational level |  |  | X |  |  |
| T | L | Development of information for employees |  |  | X |  |  |
| O | E | Monitoring of green policy |  |  | X |  |  |
| T | S | Implementation of privacy policy into day to day operation |  |  | X |  |  |
| T | H | Evaluate safety data |  |  | X |  |  |
| S | S | Develop privacy policy |  |  | X |  |  |
| S | L | Development of alcohol and drugs policy |  |  | X |  |  |
| S | E | Develop and maintain public relations program |  |  | X |  |  |
| T | S | Manage administrative organization |  |  | X |  |  |
| S | S | Develop safety policy |  |  | X |  |  |
| S | E | Presentation of organization on a strategic level |  |  | X |  |  |
| S | E | Development of green policy |  |  | X |  |  |
| S | E | Development of dangerous cargo policy an pollution control policy |  |  | X |  |  |
| S | H | Negotiate budget for equipment |  |  | X |  |  |
| T | S | Manage system for procedure changes |  |  | X |  |  |
| O | L | Administration of selection procedure |  |  | X |  |  |
| O | L | Scheduling and rostering |  |  | X |  |  |
| O | L | Plan and oversee training cycle |  |  | X |  |  |
| O | E | Execution of dangerous cargo policy and pollution policy |  |  | X |  |  |
| T | L | Develop system for stress management |  |  | X |  |  |
| S | E | Developing, executing and evaluation with purchase department |  |  | X |  |  |
| T | E | Administration of incidents and accidents |  |  | X |  |  |
| T | L | Implementation of manpower planning system |  |  | X |  |  |
| T | L | Communication and evaluation of sick leave policy |  |  | X |  |  |
| T | L | Communication and evaluation of drugs and alcohol policy |  |  | X |  |  |
| T | E | Evaluate and monitor port strategies |  |  | X |  |  |
| O | E | Execute security policy |  |  | X |  |  |
| O | E | Execute port strategies |  |  | X |  |  |
| S | H | Negotiate equipment maintenance contacts with supplier in cooperation with purchasing department |  |  | X |  |  |
| O | S | Update manuals |  |  | X |  |  |
| S | E | Develop security policy |  |  | X |  |  |
| S | E | Develop port management strategies |  |  | X |  |  |
| S | L | Choose system for manpower planning |  |  | X |  |  |
| O | H | Gather safety data |  |  | X |  |  |
| O | H | Plan periodic maintenance |  |  | X |  |  |
| T | E | Evaluate and monitor security policy |  |  | X |  |  |
| T | E | Implementation of dangerous cargo policy and pollution control policy |  |  | X |  |  |
| T | L | Communication of aggression protocol and evaluation of effectiveness |  |  | X |  |  |
| T | E | Implementation of green policy |  |  | X |  |  |
| T | E | Presentation of organization on a tactical level |  |  | X |  |  |
| S | E | Executing and evaluating liaison policy with other organizations |  |  | X |  |  |
| O | H | Operate equipment |  |  | X |  |  |
| O | L | Execution of drugs and alcohol policy |  |  | X |  |  |
| O | L | Execution of privacy policy |  |  | X |  |  |
| O | H | Update charts, information systems |  |  | X |  |  |
| O | H | Unplanned maintenance |  |  | X |  |  |
| O | H | Gather monitoring data |  |  | X |  |  |
| S | L | Negotiate budget for manpower planning |  |  | X |  |  |
| S | L | Setup of system for stress management |  |  | X |  |  |
| S | L | Development of sick leave policy |  |  | X |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | S | H | E | L |
| Strategic | 1. Develop communication- and other procedures 2. Design emergency procedures 3. Design emergency procedures 4. Overseeing the development of procedures in accordance to IMO and IALA guidelines / rules | 1. Purchase new equipment   Involved in setup of traffic planning system  Ensuring that training facilities are operational  Enter contract with suppliers in coordination with purchase department   1. Negotiate budget for equipment   Negotiate equipment maintenance contacts with supplier in cooperation with purchasing department | Enter contract with suppliers in coordination with purchase department  Ensuring that the aims and objectives of the VTS are met at all times  Risk management analysis  Evaluate safety data  Presentation of organization on a strategic level  Develop security policy  Development of green policy  Develop and maintain public relations program  Development of dangerous cargo policy an pollution control policy  Executing and evaluating liaison policy with other organizations | Develop, evaluate and adjust system for recurrent training *opmerking: indien ook inhoud training dan JA*  Develop selection process  Design agression policy  Review selection process  Create a safety culture  Develop privacy policy  Development of alcohol and drugs policy  Negotiate budget for manpower planning  Choose system for manpower planning  Develop system for stress management  Development of sick leave policy |
| Tactical | Evaluate and amend (emergency) procedures  Manage administrative organization  Manage system for procedure changes | Involved in placement of equipment | Monitoring of green policy  Administration of incidents and accidents  Evaluate and monitor port strategies  Evaluate and monitor security policy  Implementation of dangerous cargo policy and pollution control policy  Presentation of organization on a tactical level | Implementation of privacy policy into day to day operation  Plan and oversee training cycle  Implementation of manpower planning system  Communication and evaluation of sick leave policy  Communication and evaluation of drugs and alcohol policy  Communication of aggression protocol and evaluation of effectiveness  Setup of system for stress management |
| Operational | Monitor execution of procedures  Update manuals | Plan periodic maintenance  Operate equipment  Unplanned maintenance  Update charts, information systems  Gather monitoring data | Presentation of organization on an operational level  Execution of dangerous cargo policy and pollution policy  Execute security policy  Execute port strategies  Gather safety data | Application of team management  Execution of drugs and alcohol policy  Application of conflict management  Execution of aggression protocol  Execution of TRM-training (statistics, decision making,teamwork, leadership, communication, stress and fatigue etc.)  Administration of selection procedure  Scheduling and rostering  Execution of privacy policy |