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| IALA Guideline |

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VTS VHF VOICE Communication

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# INTRODUCTION

Effective VTS VHF communications directly contribute to navigational safety and efficiency; conversely, ineffective communication and misunderstandings may contribute to near misses and accidents. Effective communication is therefore an essential part of a VTSO’s duties. However, there remain inconsistent approaches to VHF procedure between personnel, VTS authorities and training establishments. The 2012 IALA VTS Symposium in Istanbul recognized the need to produce documents relating to VTS communication in order to facilitate clear and unambiguous communication.

The maritime industry comprises of personnel originating from many different parts of the world. It is crucial that native and non‐native English speaking VTSOs speak in a structured and effective manner to facilitate mutual understanding.

The messages sent are received by several parties in the VTS area and can thereby improve the situational awareness of everyone. VTSOs are speaking to entire bridge teams and other vessels listening on the VHF channel whose backgrounds, experience, and knowledge will vary. Messages should be formulated in a procedural manner at all times. The VTSO should always communicate professionally in accordance with communication procedures.

# AIMS AND OBJECTIVES

The objectives of this guideline are:

* to engage and support all VTSOs, new and experienced, in promoting best practice in effective VTS radio voice procedures
* to assist competent authorities, VTS authorities and training organisations when developing standardized operating procedures on communication.
* to provide guidance that aims to ensure consistency amongst VTSOs when communicating on the VHF.

# GENERAL COMMUNICATION RULES

Research and experience suggest that a causal factor in many shipping accidents is misunderstanding when speaking through VHF radio. The effective use of structured communication is a key factor in ensuring safe and efficient navigation.

One of the main duties of VTSOs is to collect, analyse and provide information. Structured communication applies to both routine and non‐routine situations. Sometimes operations are performed in very busy areas leading to congested VHF frequencies and a high workload for the VTSO. The standardization of communication is a powerful tool to manage these situations.

When people interact, they need to adjust their speech and vocal patterns in order to increase the likelihood of mutual understanding. These adjustments are general communication rules that should be considered by all VTSOs regardless of experience or native language whilst speaking on the VHF. The general rules are listed below in subsequent sections of this guideline.

In order to provide safe guidance to traffic the VTSO should be able to communicate in English. The model courses associated with IALA Recommendation R0103(V‐103) on Standards or training and certification of VTS personnel contain a reference to the desired level of command of English.

## STANDARDISED COMMUNICATION

VTSOs need to divide their attention amongst several tasks. Standardized communication significantly contributes to communication in different languages and aids time management. It can also help a VTSO to produce and understand communication with the minimum of effort thereby leaving processing space in the brain for the management of traffic.

Standardized communication is only useful when used in the proper way. This section strives to explain the rationale behind standardized communication.

**People perform in different ways:**

**Skill-based** are those activities that we perform automatically. There is no conscious processing in the brain; we do not think when we execute them. Activities that we perform on this level are e.g. walking, bicycling, manipulating a mouse and so on. People are ‘designed’ to execute these tasks even better without conscious processing in the brain. Imagine for example: when you run down the stairs and suddenly wonder how you do that? You immediately improve your chances of falling down.

**Rule-based** are activities that require more brain processing. These are executed on a sub‐conscious level. They include activities that we perform very often. They become routine. Although they may be complex, the VTSO performs these activities so often that he does not really need to put much thought into them. For example, when someone asks you how much 2 times 2 is, you do not really need to think about this. You can say instantly that the answer is 4.

**Knowledge-based** activities require active decision‐making. These are matters that we need to figure out and we do this in our working memory. The VTSO needs to use his brain capacity to reach a solution. This brain activity is a single channel. We can only solve one problem at a time.

When we are in a situation that causes stress, either because of pressure or because of a difficult situation in the VTS area, the knowledge-based level is affected the most. Stress limits our ability to think. It is therefore essential that communication is not also on a knowledge-based level, because you may have difficulty to understand each other. Communication problems can take up a brain capacity that is very much needed for the management of traffic. If a VTS authority has communication procedures in place and the VTSO is disciplined enough to use them every time, the use of these procedures will be on a rule-based level. This level is less likely to be affected by stress. This means that the VTSO can use his / her brain processing resources to solve the problem, while professional communication is maintained.

## CULTURAL DIFFERENCES

Differing cultural experiences and backgrounds may result in different responses to situations. A lack of awareness of these differences could increase the possibility of making errors and leads to misunderstanding.

When VTSOs communicate cross‐culturally special attention should be paid to the following:

* Crucial information should be shared with navigating officers in order to create a common perception of potential dangers, even if this information seems ‘obvious’.
* Read‐back techniques should be used when information may be misunderstood. E.g. number of persons on board or information that would benefit others using the VTS area, instructions or advice.

## USING VHF

The proper use of VHF equipment is essential if transmissions are to be successful. When VTSOs use VHF equipment, they should consider the volume and the position of the microphone. To ensure the complete reception of the message a proper push to talk (PTT) discipline is essential, since there may be a delay in transmission after pressing the PTT button. VTSOs should pause briefly before passing the message.

# COMPILE A MESSAGE

Before VTSOs transmit, they must take a moment to **think**. This may sound rather obvious; however, it remains a common error among VTS personnel. Native English speakers are particularly prone to this as they have the ability to respond immediately without needing time to translate a message received and/or construct a response. VTSOs should provide considered responses in order to resist the natural pressure personnel put on themselves to respond quickly before they have had time to think.

This section refers to the structure and content of VTS radio communications.

## MESSAGE structure

In order to improve radio discipline, the VTSO should use the ‘message markers’ listed and explained in IALA Guideline 1089. This is in order to keep the communication short, to the point and clear for all users. There are eight Message Markers, but only seven should be used by VTS. In a VTS context the message marker ‘INTENTION’ is for ship-to-shore use only.

* INFORMATION
* WARNING
* ADVICE
* INSTRUCTION
* QUESTION
* ANSWER
* REQUEST

Pro‐words complement the message marker and prepare the receiver for the nature and content for the message that will follow (e.g. ‘WEATHER’ before ‘INFORMATION’ and ‘COLLISION’ before ‘WARNING’).

## MESSAGE structure

The use of structure provides consistent message formulation and conveys a professional attitude to stakeholders. This technique also provides familiarity to the receiver, setting the tone of a safe and efficient VTS. VTS VHF communications should therefore be structured in order to give the best chance of understanding to the receiver and to keep the message as concise as possible.

Radio communications between coastal stations and ships must comply with the ITU Radio Regulations[[1]](#footnote-1). These regulations prescribe the structure of radio communication messages.

Example of a basic VTS message structure (see also Annex B):

|  |  |  |  |
| --- | --- | --- | --- |
| 1. Header/Establish contact | | (Name of vessel/Call sign) this is (*name*) VTS |  |
| 2. Body/Exchange information | | a. Message marker | See message markers |
| b. Phrase(s) |  |
| 3. Closing | End of message | Over | When expecting a reply |
| End of conversation | Out | When expecting no reply |

It is advised that a maximum of two message markers and two phrases are used in one transmission to avoid an overload on the recipient.

## GENERAL RULES FOR PHRASE CONTENT

There are some general rules for phrase construction and content, which should be considered as follows:

* + Basic words are standardised ways of saying common things in phrases which promote consistency among operators. The common basic words and their meanings are detailed in Annex.
  + Avoid unnecessary words (e.g. ‘what time do you think your ETA is at the pilot station, thank you’, should be: ‘what is your ETA at the pilot station’).
  + Keep the subject, verb, and object as near to one another as possible.
  + Use the active form (such as ‘is overtaking...’; instead of passive ‘has been overtaken…’)
  + When it is possible make sentences positive.
  + Each phrase should contain only one topic.
  + Information must be relevant, as accurate as possible and timely.
  + Geographic locations - names used should be those on the chart or in Sailing Directions. Should these not be understood, true bearing and distance or latitude and longitude should be given.
  + Specific pro-words before the message marker (e.g. “weather” before information and ‘collision’ before ‘warning’) may be used to emphasize the contents of the communication.
  + In crossing situations, communications should be addressed to the give-way vessel first, and then the stand-on vessel. Head on and overtaking situations should be evaluated case by case.
  + When providing traffic information, the VTSO should use geographic locations rather than latitude and longitude.
  + Spelling words and the proper use of numbers (names of buoys, stations, call signs, etc.), spell out words when deemed necessary using the tables in Annex A.

## ABBREVIATIONS

Abbreviations will often save time in speech. Many abbreviations are so commonly used in normal speech that they are more familiar than their original unabbreviated form. The use of such abbreviations in radio transmissions is to be encouraged provided that:

1 they are quicker and easier to use than the full word (e.g. ETA, ETD)

2 they are sufficiently well known to avoid any confusion and subsequent confirmatory transmissions.

# DELIVERING A MESSAGE

This section refers to vocal delivery techniques used in VTS radio communications.

When communicating orally using radio devices, exchanges must be professional, clear, concise and accurate. In order to achieve effective communication, the following steps should be considered.

## PREPARATION

Before you start transmitting you should prepare the message. Listen on the frequency to ensure that there will be no interference with a transmission from another station. Start your message when you are physically and mentally ready.

## TONE AND VOLUME

The tone of the VTS operator’s voice is crucial for mutual understanding. A message should be supported by the tone of voice used by the VTSO. Research has indicated that how words are expressed are just as important as what words are used.

Transmissions should be sent with a tone of calm confidence, politeness and professionalism. No matter if a VTS receives over familiar or even aggressive transmissions an operator/supervisor must always remain professional.

Voice volume is also important. The volume of a transmission should be at a level used for normal conversation. Shouting is unprofessional and causes distortion and speaking too quietly could result in the message not being heard.

## EMPHASIS ON KEYWORDS

The keyword, most important part of the message, should be spoken slightly louder, longer, and higher than its neighbouring words (e.g. WARNING SHALLOW water AHEAD of you).

## SPEECH RATE

Speech rate is the speed at which a speaker conveys the message. Academic studies report that on average, the speech rate of an adult English native speaker is reported to be between 150 and 190 words per minute (WPM). In an international environment in which people from different linguistic backgrounds speak with their own accents, intonation, and pronunciation, it is crucial to maintain an appropriate level of speech rate in order to avoid speaking at a faster rate that could greatly hinder comprehension and increase language anxiety:

* Modulating speech at a slower rate of around 120 WPM is highly recommended for clear and effective communication
* In emergency situations, a much slower rate of 100 WPM should be applied so important information can be clearly and accurately delivered under high-pressure and cognitively challenging conditions

## WORD GROUPING AND PAUSING

Together with the adjustment of speech rate, the VTSO can use word grouping and pausing strategies to increase the intelligibility of VTS communication. In other words, intelligibility can be enhanced considerably by dividing sentences into smaller groups of phrases and by pausing briefly between word groups. VTSOs can also moderate their speech rates by pausing between each word group.

The effect of word grouping and pausing is important for the following reasons:

* 1. It gives listeners time to process each pack of information that is delivered. Furthermore, it enables speakers to prepare subsequent information for delivery.
  2. It decreases the use of unnecessary fillers like ‘*um, hm, uh, …’*, which hinders mutual intelligibility.

It is generally recognised that the use of four words in a phrase is best understood by listeners. Therefore, phrases should be grouped and paused after four words if possible. This enhances comprehension and clear communication.

## REPETITION

When communication is difficult, phrases, words, or groups may be transmitted twice. If any part of a message is considered sufficiently important to need safeguarding, the VTSO should repeat the message, using the appropriate basic words ‘I repeat’.

## SPELLING

Phonetic alphabets are used to distinguish between letters which sound similar when transmitted over the radio. They are commonly used when transmitting call signs and in cases where a single letter is used to designate something. When spelling of letters or digits is necessary refer to the IMO SMCP.

# HOW TO INTERPRET A MESSAGE

This section refers to the accurate interpretation of radio communications received by a VTS.

Interpretation of the message requires skills such as encoding. Just as confusion can arise from errors in encoding, it can also arise from decoding especially during emergency situations (see figure 1). The use of radio devices and internal/external factors could be reasons that influence the decoding procedures. In order to achieve effective communication a number of actions should be considered as visualised in the next figure.



1. Communication process

## EFFECTIVE LISTENING SKILLS

Effective listening skills are used to actively understand information provided by the speaker and it can be categorized into the following steps:

**Hearing**

Hearing involves the reception of sounds from the sender by:

* Avoiding interruptions.
* Clear one's mind of distractions.
* Focus on the speaker

**Clarity**

The sender and receiver both have a responsibility to ensure that what is said is understood:

* Ask open questions to probe for further detail if required. Open questions prompt the speaker to provide more information. These questions generally ask ‘who’, ‘what’ or ‘where’.
* Avoid asking leading questions. (e.g. QUESTION Is it your intention to pass to north of buoy ONE?. In multicultural environments some people could understand that it was the way to answer and not that is a way to guide the receiver in the desired direction. ADVICE or INSTRUCTION followed by the suggested direction is the best solution in multicultural environmental)
* Avoid coming to conclusions before the sender finishes.
* Be aware of the sender’s choice and application of words.

**Interpretation**

Interpretation not only requires verification of what the sender has said, but also the understanding of the information given.

Steps to ensure understanding are:

* Communicate your interpretation and verify its accuracy.
* Identify the main issues.
* Do not assume what the sender will say, particularly when receiving routine communications.

## Read BacK

Read back could be considered as a powerful feedback tool.

There are two main principles for reading back communications. The first principle is to benefit other mariners and the second is to ensure that the message is understood correctly.

Read back is recommended when the message markers ‘INSTRUCTION, ADVICE or WARNING’ are used by the VTSO. This can be requested by the VTSO using the message: ‘Read back’. The receiver should then read back the message as it was sent providing the VTS with confirmation that the previous sent message has been received correctly.

## Influence of internal and external factors

Some factors such as mental and emotional state, health, culture, working environment, distractions etc. can influence the interpretation of communications. Efforts should be made to minimize their negative effects on communications.

# ACRONYMS

ETA Estimated Time of Arrival

ETD Estimated Time of Departure

IALA International Association of Marine Aids to Navigation and Lighthouse Authorities – AISM

IMO International Maritime Organization

PTT Push to Talk

SMCP Standard Marine Communication Phrases (IMO)

VHF Very High Frequency (30 MHz to 300 MHz)

VTS Vessel Traffic Services

VTSO Vessel Traffic Services Operator

WPM Words Per Minute

# REFERENCES

* IMO Resolution A.857(20) Guidelines for Vessel Traffic Services
* IMO Resolution A.918(22) IMO Standard Marine Communication Phrases (SMCP)
* ITU Radio Regulations, Volume IVE, Recommendation ITU-R M.1171-0 and subsequent chapters

# ANNEX A VTS COMMUNICATION PHRASES / PHRASEOLOGIES

# GENERAL COMMUNICATIONS

### GENERAL

| Message Element | Message Intent |
| --- | --- |
| **ALL RECEIVED** | Information has all been received as expected |
| **APPROVED** | Permission for proposed action granted. |
| **ANCHOR WATCH** | Maintain lookout when at anchor |
| **BERTHING SCHEDULE** | A detailed plan of times and events affecting vessels in the port. |
| **BOARDING SPEED** | The speed of a vessel adjusted to that of a pilot boat at which the pilot can safely embark/disembark |
| **CHANGE CHANNEL TO (channel)** | Request to switch VHF channels |
| **CHECK** | Examine (something) in order to determine its accuracy, quality, or condition, or to detect the presence of something. |
| **CONFIRM** | Request verification of something: (e.g. permission, instruction, action, information, intentions). For example, *Confirm you have received the following…* |
| **CONTACT** | Establish communications with… |
| **CONVOY** | A group of vessels navigating together in same direction |
| **CONVERGING TO** | Going towards/approaching |
| **CORRECT** | Free from error |
| **CORRECTION** | A change that rectifies an error or inaccuracy |
| **DIVERGING FROM** | Going away from/Separating from |
| **DREDGING** | Moving of an anchor over the sea bottom to control the movement of the vessel |
| **DRAGGING** | Moving of an anchor over the sea bottom involuntarily because it is no longer preventing the movement of the vessel |
| **DISREGARD** | Ignore last message / Consider that transmission as not sent |
| **DO NOT** | Instruction that an activity must not be carried out |
| **GO AHEAD** | VTS is ready to receive your information |
| **IMMEDIATE ACTION** | React quickly to a situation. |
| **INCORRECT** | That is not free from error |
| **I REPEAT** | I will state my message again |
| **I SPELL** | Phonetic spelling follows |
| **LAST LINE** | Mooring lines are released except the final line needed to hold the vessel. |
| **(AtoN) MISSING** | (AtoN) completely absent from position |
| **MAINTAIN** | Continue in accordance with the condition(s) specified or in its literal sense, e.g. “Maintain your course” |
| **NEGATIVE** | “No” or “Permission is not granted” or “That is not correct” |
| **NOT APPROVED** | Advising that approval for an activity has not been granted |
| **OCCUPIED** | Berth or anchorage taken by another vessel |
| **OUT** | End of transmission. No answer is required or expected. |
| **OVER** | End of transmission. An answer is expected. |
| **PROHIBITED** | Not permitted |
| **QUARANTINE** | When a vessel is suspected to be carrying contagious disease or health related issue is held in isolation from the shore. |
| **READ BACK** | Repeat all, or the specified part, of this message back to me exactly as received |
| **REPEAT or SAY AGAIN YOUR LAST** | A request to retransmit all or a portion of a transmission |
| **REPORT** | Pass me the following information |
| **REPORTING POINT** | A mark or position at which a vessel is required to report to the local VTS |
| **REQUEST** | A request for information or intentions |
| **RESTRICTED** | Permitted access to certain vessels at certain conditions |
| **SAFE DISTANCE** | The minimum distance allowed to avid dangerous situations |
| **SINGLED UP** | Mooring lines are released except the minimum needed to hold the vessel. |
| **SPECIAL OPERATION** | A performance of a practical work or of something which affects the safety of navigation (e.g. difficult tow, diver, survey, dredging, cable line laying). |
| **STAND BY** | Wait and I will call you |
| **STAND BY ON (channel )** | Request for a vessel to maintain a listening watch on a specific VHF channel |
| **STRIKE** | Port services temporarily suspended due to a protest action |

### Requesting additional reports

| Message Element | Message Intent |
| --- | --- |
| **REPORT LEAVING/PASSING/ETA AT (position/area)** | Request to inform VTS when the vessel has left/passed a specific position or area. |
| **REPORT [AGAIN] AT (location or time)** | Request to [re]inform VTS when the vessel has reached a specified location or time |

### Call requests

| Message Element | Message Intent |
| --- | --- |
| **CALL (VTS/allied service) [AT (time/position)] ON (channel)** | Request to contact [at the specified time or position] the VTS or allied service on a VHF channel |
| **CALL (vessel) FOR BRIDGE TO BRIDGE** | Request to establish contact with another vessel to exchange intentions  (e.g. passing manoeuvres/confirming intentions/sharing information) |
| **CALL AGAIN (event/time)** | Request for the vessel to call VTS again when a specified event occurs  (e.g. after last line, when pilot boards) or in a specified time period. |

# REPORTING OF VESSEL IDENTIFICATION AND PARTICULARS

| Message Element | Message Intent |
| --- | --- |
| **QUESTION WHAT IS YOUR (last port of call, route, maximum draft etc.)** | Request specific information |

# NAVIGATING IN VTS AREA

## APPROACH/ENTRY INTO VTS AREA

| Message Element | Message Intent |
| --- | --- |
| **CLEARANCE** | Authorised to proceed under the condition specified |
| **PERMISSION TO (ENTER (details)** | Permission provided to go into an area such as VTS area and fairway |
| **PERMISSION TO CROSS (details)** | Permission provided to go across over a line or area. |
| **PERMISSION TO MOVE IN (area)** | Permission provided to change position within an area (e.g. fairway channel) |
| **DO NOT PROCEED BEYOND (position)** | Do not to go past a certain position or point (e.g. pilot boarding ground without a pilot) |
| **DO NOT ENTER (area)** | Do not to go into an area or zone. |
| **MAINTAIN ETA TO (location)** | Request to continue to have a specified ETA to a location (e.g. pilot boarding ground) |
| **REMAIN IN PRESENT POSITION** | Advice, instruction or request to remain in a specific position |

## readiness/speed

This refers to Speed over the Ground (SOG)

| Message Element | Message Intent |
| --- | --- |
| **REPORT WHEN ENGINES READY** | Request to inform the VTS when the engines are ready |
| **KEEP YOUR ENGINES READY** | Request for the vessel to keep their engines ready |
| **REPORT WHEN UNDERWAY** | Request to inform the VTS when the vessel is underway |
| **MAINTAIN (speed)** | Keep a specified speed |
| **REDUCE/INCREASE SPEED TO (speed)** | The present speed must be reduced or increased to the specified speed and maintained until further notice |
| **WHAT IS YOUR MINIMUM SAFE SPEED** | Request to report the vessel’s minimum safe speed |
| **PROCEED AT SAFE SPEED** | Vessel has to continue at, or reduce speed to, the vessels’ safe manoeuvring speed |

## MOVEMENTS

| Message Element | Message Intent |
| --- | --- |
| **PROCEED TO (position / area) [AT (time)]** | Move directly from the present position to the specified position [at a specified time] |
| **WAIT [for (vessel) TO (details)]** | Wait for a specified vessel to complete a task (e.g. clear berth / enter fairway / get underway / leave berth) or for other reasons specified) |

### PERMISSION TO PROCEED FROM OR TO ALONGSIDE, A BERTH OR ANCHORAGE

| Message Element | Message Intent |
| --- | --- |
| **PERMISSION TO (enter / depart / proceed) FROM (berth/anchorage/ lock/creek) [TO (location and/or subject to condition)]** | Permission has been granted to proceed to undertake an activity (e.g. enter, depart, proceed) from a location (e.g. berth, anchorage area, lock, creek, fairway, pilotage area). [The vessel may be subject to other conditions which should be included as appropriate.] |
| **REMAIN (alongside/berth/anchorage) (give reason)** | Advising the vessel to hold position at a location (e.g. alongside, a berth, anchorage) for a specified reason. |

### 

| Message Element | Message Intent |
| --- | --- |
| **BERTH (name) [(port / starboard side) TO]** | Notification of berth allocation [notification of side to the berth wall] |
| **BERTH NOT CLEAR/CLEAR AT (time)** | Advising that the berth is not free from obstruction / not available [and time the berth is expected to be available] |
| **WAIT UNTIL BERTH CLEAR** | Instructing or advising a vessel to wait until the berth is free from obstruction |
| **(Vessel) LEAVING BERTH (name) AT (time)** | Information that a (vessel) will leave a berth at a specified time |
| **BERTHING DELAYED UNTIL (time / by XX hrs)** | Advising that berthing will be postponed until a specified time |
| **BERTH CHANGED TO (provide new berth)** | Information about a new berth. |

### DEPARTURE

| Message Element | Message Intent |
| --- | --- |
| **CALL (XX minutes) BEFORE DEPARTURE** | Request for the vessel to report a specified amount of time before departing |
| **REPORT WHEN SINGLED UP** | Request for the vessel to report when it has singled up |

### ANCHOR OPERATIONS

| Message Element | Message Intent |
| --- | --- |
| **ANCHOR (in position/area)** | Instruction to a vessel to anchor in a nominated position/specified location |
| **ANCHORAGE** | A place where vessels anchor or can be anchored |
| **ANCHORING PROHIBITED (details)** | Advising that anchoring is forbidden. Further details may be provided on specified areas or the entire VTS area. |
| **ANCHORED IN WRONG POSITION** | Information that the vessel has anchored in an incorrect location |
| **ANCHOR CLEAR OF (details)** | Request for a vessel to anchor clear of a specified location (e.g. fairway / outside port limits) |
| **HEAVE UP ANCHOR** | Request for a vessel to weigh anchor |
| **CONFIRM ANCHOR UP/AWEIGH** | Asking for confirmation that the anchor is clear |
| **REPORT WHEN AT ANCHOR** | Request for a vessel to report when the vessel is anchored |
| **CALL (XX minutes) BEFORE HEAVING UP ANCHOR** | Request for the vessel to report before they weigh anchor |
| **YOU ARE DRAGGING ANCHOR CHECK YOUR POSITION** | Sensor information indicates the vessel is dragging anchor. The vessel is requested to check position. |

# PILOTAGE

| Message Element | Message Intent |
| --- | --- |
| **PILOT BOARDING TIME (time) [AT (location)** | Information when the pilot will board the vessel at a specified time [and location] |
| **WAIT FOR PILOT at (location)** | Instruction or Request for the vessel to wait for a pilot in a specified location |
| **PILOT CANNOT BOARD [reason]** | Advising that the pilot cannot board the vessel [reason may also be given] |
| **PILOT DELAYED** | Advising that the pilot will be delayed |
| **PILOTAGE SUSPENDED** | Pilotage service is unavailable |
| **PILOTAGE RESUMED** | Pilotage service returned to normal |
| **MAKE A LEE** | Use the ship to provide shelter. Typically used to facilitate boarding |
| **PEC (Pilot Exemption Certificate)** | A certificate which removes the need to use a pilotage service. It normally applies to a specific vessel and route. |
| **PILOT EMBARKATION ORDER** | The sequence in which pilots board vessels |
| **PILOT DISPATCH** | Pilot dispatch centre or pilot dispatch office |
| **PILOT STATION** | A place where a pilot embarks/disembarks |

# PROVISION OF TRAFFIC INFORMATION

| Message Element | Message Intent |
| --- | --- |
| **NO REPORTED TRAFFIC** | Inform vessel that the VTS is unaware of traffic in the area. |
| **MEET** | Encounter one or more vessels |
| **PASS** | Move in a specified direction and leave behind or on one side in proceeding another vessel or object |
| **OVERTAKE** | Inform a vessel that it going to pass other vessel moving in the same direction |
| **INWARD** | Direction of a vessel into a port/fairway/channel/area |
| **OUTWARD** | Direction of a vessel from a port/fairway/channel/area |
| **EASTBOUND/ WESTBOUND/ NORTHBOUND/ SOUTHBOUND** | Directional information about a vessel’s movements |
| **TURN/ALTER** | Change direction |
| **ENTER** | Proceeding into a port/fairway/channel/area |
| **REPORT WHEN UNDERWAY** | Request to a vessel to report when it is not at anchor or made fast to the shore. |
| **LEAVE** | Outgoing from port/fairway/channel/area |
| **DEPART** | Starting a journey |
| **CROSS** | Vessel proceeding in a direction near right angle with traffic flow or route.  Vessel is proceeding through an area/fairway (one side to another). |
| **NOT UNDER COMMAND** | Inform traffic that a vessel is not able to manoeuvre in accordance to the COLREG |
| **CONSTRAINED BY (details)** | Inform traffic that a vessel is not able to manoeuvre due to its draft |
| **RESTRICTED IN HER ABILITY TO MANOUVRE** | Inform traffic that a vessel is not able to change own course due to its works |
| **DUE TO** | Inform that because of negative connotation …… |
| **NAVIGATIONAL HAZARD (details)** | Advising of a specific navigational hazard (e.g. derelict vessel, uncharted rock, pipeline leaking gas) |
| **(DREDGING/DIVING/SURVEY) OPERATION IN (position/area)** | Advising of activities in a specific position/area |
| **(FISHING/PLEASURE) BOATS IN (position/area)** | Inform vessel that traffic, with unknown intentions, is in the area . |

# PROVISION OF WEATHER AND HYDROGRAPHICAL INFORMATION

| Message Element | Message Intent |
| --- | --- |
| **GOOD VISIBILITY** | The visibility is more than 5 nautical miles |
| **MODARATE VISIBILITY** | The visibility is between 2 and 5 nautical miles |
| **POOR VISIBILITY** | The visibility is less than 2 nautical miles |
| **VERY POOR VISIBILITY** | The visibility is less than 1000 metres |
| **WIND DIRECTION** | Indicates the direction from which wind is blowing /coming from |
| **WIND SPEED** | Indicates the speed of the wind (knots or meters per seconds) |
| **CURRENT DIRECTION** | Indicates the direction from which current setting (goes) |
| **CURRENT SPEED** | Indicates the speed of the current (knots or meters per seconds) |
| **VISIBILITY REDUCED BY (FOG, MIST, SNOW, DUST, RAIN, HAZE) IN (area)** | The visibility is reduced by some factors. |
| **VISIBILITY IN (position/area) (XX meters/cables)** | Information about restricted visibility in a specified area |
| **VISIBILITY EXPECTED TO (increase/decrease)** | Future information on how the level of visibility may increase or decrease |
| **WIND EXPECTED TO INCREASE TO (XX knots/m/s)** | Information about the wind conditions in the area |
| **IF WIND EXCEEDS (XX knots/m/s), (details of action)** | Information that if the wind conditions exceed a threshold then a level of action will be required (e.g. vessels will be instructed to leave berths, tug services will be suspended) |
| **GALE/STORM/TYPHOON EXPECTED in XXX (area) AT (XXXX) LOCAL TIME** | Inform about pending adverse weather conditions. |
| **TIDE IS (rising /falling /high / low)** | Information about the tidal conditions in the area |
| **WATER LEVEL AT (position) IS (meters/ cm)** | Information about the water levels in the area |

# RESPONDING TO DEVELOPING UNSAFE SITUATIONS

### Position

| Message Element | Message Intent |
| --- | --- |
| **[YOUR POSITION] (details)** | Advising that the vessel of its current position relative to a location / landmark-  .../ bearing ... degrees, distance ... kilometres /  nautical miles from ... .  ~ in the centre of the fairway.  ~ on / not on the radar reference line (of the fairway).  ~ on the ... (cardinal points) side of the fairway. |

### Course

| Message Element | Message Intent |
| --- | --- |
| **LEAVE (details)** | Advising that the vessel leave/has left an area (e.g. fairway / recommended route / track) |
| **APPROACH (details)** | Advising that the vessel that by going on in the same way the vessel will approach some obstacle / danger (e.g. submerged wreck) |
| **RUN INTO DANGER (details)** | Advising that the vessel that by going on in the same way the vessel will encounter some danger –  ~ shallow water ... bearing 220, distance 1 nm.  ~ submerged wreck ... (cardinal points) of you.  ~ risk of collision (with a vessel bearing ... degrees, distance ... kilometres / nautical miles). |
| **SHALLOW WATER (details)** | Advising that the vessel is heading towards or has entered shallow water (e.g. north of route) |
| **DEVIATED FROM (details)** | Advising that the vessel deviated from something (e.g. the channel, sailing / passage plan) |
| **CLOSE QUARTER SITUATION WITH** | Advising the vessel that she is passing close to another vessel |
| **RISK OF GROUNDING/COLLISION (details)** | Advising the vessel of a dangerous situation (e.g., an object, another vessel, shallow water) |
| **COURSE TO MAKE GOOD** | Advising the vessel about the new course |
| **TRACK** | The path followed, or to be followed, between one position and another. |

# MANAGEMENT OF TRAFFIC

| Message Element | Message Intent |
| --- | --- |
| **YOUR INTENTION** | Question requesting the vessel to advise VTS of its plan |
| **KEEP CLEAR OF/AVOID (details)** | Request to stay away from something (e.g. area, location, object) |
| **RETURN TO (details)** | Request for the vessel to return to something (e.g. area, location, route) |
| **WAIT FOR (details)** | Request for the vessel to wait for an event (e.g. vessel leaving berth, vessel ahead of you, improvement in visibility) |
| **PROCEED/NAVIGATE WITH CAUTION** | Request for the vessel to navigate with caution |
| **PASS (details)** | Request for the vessel to pass to a relative direction or area (e.g. NW of location) |
| **KEEP/MAINTAIN WIDE BERTH** | Request for the vessel to keep adequate distance from other vessels or objects |
| **KEEP A SAFE DISTANCE OF (XX miles/cables)** | Request for the vessel to maintain a minimum adequate length of space from a vessel or object |
| **REMAIN OUTSIDE (area)** | Advising the vessel to stay outside an area until further notice |
| **DO NOT PROCEED (details)** | Instruction for the vessel not to continue or move |
| **DO NOT ENTER** | Instruction for the vessel not to go into an area |
| **DO NOT OVERTAKE** | Instruction for a vessel not to go past another vessel |
| **DO NOT CROSS FAIRWAY** | Instruction for a vessel not to go across the fairway |
| **RESTRICTED AREA (name)** | Information provided about a restricted area |
| **AREA TO BE AVOIDED (name)** | Advice to keep clear of a specific area |
| **CLOSE UP** | To decrease the distance to the vessel ahead by increasing one’s own speed |
| **DROP BACK** | To increase the distance from the vessel ahead by reducing one’s own speed |

# RESPONDING TO EMERGENCY SITUATIONS

No two emergencies will ever be the same. The same situation can develop and be resolved in an entirely different way as there are so many variables that can affect the eventual outcome. One of the most important task for VTS personnel is to gather information related to the incident in order to forward it as soon as possible to the emergency response service. Following some words/expressions that could be used during an emergency situation.

| Message Element | Message Intent |
| --- | --- |
| **WHAT PROBLEMS DO YOU HAVE?** | Assessing situation |
| **FLOODING** | Major uncontrolled flow of seawater into the vessel |
| **CAPSIZE** | To turn upside down in the water |
| **SPILLAGE** | The accidental escape of oil, etc, from a vessel, container, etc. into the sea |
| **OIL CLEARANCE** | Oil skimming from the surface of the water |
| **LEAKING** | Escape of liquid such as water, oil, etc., out of pipes, boilers, tanks, etc. or a minor inflow of seawater into vessel due to damage to the hull |
| **LIST** | Inclination of the vessel to port or starboard side |
| **CRASH STOP** | An emergency reversal operation of the main engine to avoid collision |
| **PERSON OVERBOARD** | A situation in which a person has fallen from a ship into water and is in need of rescue |
| **KEEP SHARP LOOKOUT** | To remain vigilant or carefully watchful for something or someone. |
| **LEEWARD** | On or towards the sheltered side of ship |
| **COLLISION** | An instance of one vessel striking violently against another |
| **GROUNDING** | Run aground |
| **SINKING** | Going down below the surface of the sea and become submerged. |
| **SURVIVOR** | A person who continues to live despite having been in an extremely dangerous situation |
| **REPORT ANY DAMAGE** | Ask vessel about the status of structure loss/deficiencies occurred after an incident/accident |
| **REPORT POSITION** | Ask vessel about the actual position after an incident/accident |
| **REPORT NAVIGATIONAL CONDITIONS** | Ask vessel about the own seaworthiness |
| **REPORT NUMBER OF PERSONS ONBOARD** | Ask vessel about the number of people on the vessel |
| **REPORT NUMBER OF CASUALTIES** | Ask vessel about the number of injured persons |
| **REPORT NUMBER OF DEAD** | Ask vessel about the number of deceased persons |
| **ASSISTANCE REQUIRED** | Ask vessel about the kind of help is needed (firefighting, tug, medical evacuation, etc.) |

For more details related to the emergency communication refer to IMO SMCP.

# ANNEX B EXAMPLES OF MESSAGES

|  |  |  |
| --- | --- | --- |
| **Title** | **Giving anchor position** | |
| **Header** | **Vessel identification** | M/V [A] |
| **VTS identification** | This is XX VTS. |
| **Body** | **Message marker** | [Information] |
| **Message content** | Anchor position:  Option 1) Bearing XXX, distance XX [miles/cables] from you.  Option 2) Latitude XX Longitude XX. |
| **Closing** | **Over/Out** | Over. |

|  |  |  |
| --- | --- | --- |
| **Title** | **Restricted/Low visibility** | |
| **Header** | **Vessel identification** | M/V [A]. |
| **VTS identification** | This is XX VTS |
| **Body** | **Message marker** | Weather [Information] |
| **Message content** | Low visibility reported XXX cables in XX [port/area]. |
| **Message marker** | [Advice]. |
| **Message content** | * Standby channel XX. * Keep sharp lookout. |
| **Closing** | **Over/Out** | Out. |

|  |  |  |
| --- | --- | --- |
| **Title** | **Arriving Berth (Positive)** | |
| **Header** | **Vessel identification** | M/V [A]. |
| **VTS identification** | This is XX VTS |
| **Body** | **Message marker** | [Information] |
| **Message content** | You have permission to [proceed to/go alongside] berth N.X. |
| **Closing** | **Over/Out** | Over. |

|  |  |  |
| --- | --- | --- |
| **Title** | **Traffic routing measures** | |
| **Header** | **Vessel identification** | M/V [A]. |
| **VTS identification** | This is XX VTS |
| **Body** | **Message marker** | [Warning]. |
| **Message content** | You are in the wrong traffic lane. |
| **Message marker** | [Instruction] |
| **Message content** | * Check your position. * Proceed to correct lane. * Alter course to [port/starboard] |
| **Closing** | **Over/Out** | Over. |

|  |  |  |
| --- | --- | --- |
| **Title** | **Traffic Information** | |
| **Header** | **Vessel identification** | M/V [A]. |
| **VTS identification** | This is XX VTS |
| **Body** | **Message marker** | Traffic [Information] |
| **Message content** | M/V [B] |
| West of you |
| Proceeding South |
| **Closing** | **Over/Out** | Over. |

|  |  |  |
| --- | --- | --- |
| **Title** | **Vessel grounded** | |
| **Header** | **Vessel identification** | M/V [A]. |
| **VTS identification** | This is XX VTS |
| **Body** | **Message marker** | [Question] |
| **Message content** | * When and where the accident happened? * Are you flooding/spilling oil? * Do you have any list? * Assistance required? |
|  | **Message marker** | [Advice/Instruction] |
|  | **Message content** | * Broadcast safety information on VHF * Display the right signal accordingly * Take actions according to the emergency plan * Stand by for further information/instructions |
| **Closing** | **Over/Out** | Over. |

|  |  |  |
| --- | --- | --- |
| **Title** | **Vessel grounded Navigational warning** | |
| **Header** | **Vessel identification** | All vessels, All vessels, All vessels |
| **VTS identification** | This is XX VTS, XX VTS, XX VTS |
| **Message content** | M/V [A] grounded in position XX  Keep a safe distance of (XX miles/cables)/wide berth requested |
| **Closing** | **Over/Out** | Out. |

1. Volume IVE, Recommendation ITU‐R, M117 and following [↑](#footnote-ref-1)