Appendix to Port Call Process
Last update July 18 2022

International Taskforce
Port Call Optimization
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## Change log

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1 Abbreviations, Introduction

1.1 Abbreviations used in port call process and/or it’s appendix

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<td>International Ship and Port Facility Security Code</td>
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<td>Maritime Labour Convention</td>
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<tr>
<td>NABSA</td>
<td>Not Aground But Safely Afloat</td>
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1.2 Introduction

This paper can be used by anybody wanting to understand the business process of a port call, with the aim to improve the port call process. The purpose is to scope the information which needs to be improved to make that happen.

Quality nautical port information is the foundation of safe, efficient and sustainable port use. Quality information means that all information is consistent, accurate, up to date, complete and most importantly, is based on a standard.

Today the quality of port information is often poor.

Causes may be:

1) Ports use national or local standards and different identifiers for berths. Shipping operates in a network of up to 1200 ports and even more hinterland connections, making it very difficult to cope with all those different standards and identifiers.

2) The available information is not owned by one party or shared with parties. Information owner is often not aware of ownervessel, or does not want to be owner of the information as this means responsibility. Information is therefore often collected through other sources, like agents, surveyors, AIS information, sensor information or big information. If information is not from the information owner, it becomes corrupt sooner or later. On top of this, information is not binding.

3) Even today less efficient communication means are used to relay information. Often one to one telephone calls, e-mails or printed documents.

4) There is no information quality assurance. Only looking at the information, there is no difference between ports with a good or bad reputation. And despite the fact that even basic service providers ashore have an ISO certification, the port industry has none to date.

Result is that it’s not possible to cross check or share information, there are no alerts if information has changed, there is no information quality indication, and information is not binding.

Therefore many different parties dealing with the same vessel could be working with different information, leading to less efficient planning of vessel operations etc.

At the same time, the users’ expectations of the accuracy of information increases.

This requires a higher update frequency, which requires digital input.
Last but not least: as marine professionals may gradually disappear from the port and shipping industry, a standard of nautical knowledge, explicitly written down, is important, not at least to the harbour master office itself.

Therefore a common understanding of the minimum information that is required for a seamless business process of a port call (which applies to every type of trade and port) is crucial. This process is based on contracts and IMO resolutions. The content of this appendix is taking into account jurisprudence of (English) law cases, IMO resolutions and day to day maritime operations.

1.3 Business process

The chapters in this appendix refer to a business process. This business process can be obtained via www.portcalloptimization.org
1.4 Actors in business process

Ship operator
Party that decides how the ship is employed and where a vessel is to call. Depending on the commercial operation conditions, e.g., but not limited: charterer, ship owner, cargo owner / trader, ship manager, carrier, parties representing / acting on behalf of before mentioned parties

Ship charterer
Person or company who hires a ship from a shipowner for a period of time

Berth planner
Party that plans the berth call. Depending on the organisation of the port, e.g. but not limited to: terminal operator, berth operator, port authority, VTS

Port planner
Party that plans the port call. Depending on the organisation of the port, e.g. but not limited to: port authority, harbour master, terminal operator, VTS, pilots, coast guard

Hydrographic service provider
Party that undertakes to arrange for the collection and compilation of hydrographic data and the publication, dissemination and keeping up to date of all nautical information necessary for safe navigation. E.g., but not limited to: national hydrographic office, regional charting agency

Ship manager
Party responsible for the day to day management, operation and maintenance of the ship. E.g., but not limited to shore side ship manager, or other party that acts on behalf of shore side ship manager e.g., but not limited to: port captain, Captain of the vessel or ship agent which handles e.g., authorities’ reporting requirements or some of the other information requested by any of the parties

Nautical service providers
Party that provides nautical services to the ship. E.g., but not limited to: pilots, tugs, linesmen, boatmen, VTS
Vessel or Cargo service providers

Party that provides vessel services or cargo services to the ship. E.g., but not limited to: bunkers, lube oil, potable water, provisions, stores, waste per IMO/MARPOL Class, repairs, cargo handling, cargo lashing, terminal operator, cargo survey

Authorities

Party that provides clearance to the ship. E.g., but not limited to: harbour master, customs, immigration, port health, port VTS, coastguard
2  Contract of sale of goods

2.1  Bulk

About 85% of global shipping is related to the carriage of bulk cargoes. Normally this trade is dominated by trading: a cargo seller and a cargo buyer. The sales or purchase contract between cargo buyer and seller specifies:

- Price
- Quantity
- Quality
- Load / discharge window
- Load / discharge port

A contract of sale may be absolute or conditional depending upon the desire of contracting parties. Based on the Incoterms the party responsible for transport of the cargo needs to charter a vessel (in case a vessel is needed). The search for available and suitable vessels might be accommodated by a (chartering) broker.

2.2  Containers

About 15% of shipping is related to containerized cargo trade. Trading is not part of container shipping, and therefore this contract is not applicable.
3  Contract for hiring vessels

3.1  General

If the party responsible for transport does not own a vessel, a vessel needs to be hired (chartered). The charterer needs to sign a contract with the (disponent) vessel owner or (disponent) operator, the so-called Charter party.

There are many different types of charter parties, the most common ones are:

- Voyage charter (also called “spot charter”): contract governing the transport of cargo from one or more loading ports to one or more delivery ports. Under this type of charter party the owner is paid “freight”- an agreed amount of money per ton of cargo. Like hiring a taxi for one trip. Often used in bulk trade. The number of times a voyage charter is used versus a time charter depends on the size of vessel, world economics, and whether one includes e.g. a time charter being sub chartered as a voyage charter. Under a voyage charter the loading and discharge ports are usually known (or range is agreed) and charterers and owners agree on cargo size and load and discharge dates. Delays on the voyage and navigational risks are owners’ responsibility, whereas loading and discharging operations are usually arranged by the charterer.
• Time charter: contract for the hire of the vessel over an agreed period of time. This can be a very short period, specifically the use of the vessel between named ports – a “time charter trip” (very similar to a voyage charter). Or it can be used to provide the services of the vessel over an extended period (a “period” charter). Under a time charter the owners are paid a fixed daily rate of hire for the services of the vessel. The charterers choose where the vessel will trade and which cargoes will be carried – they have full commercial operational control over the vessel within agreed conditions and pay for fuel and all port cost. The owners remain responsible for the operation and manning of the vessel. Like hiring a rental car with a driver from the rental company. Often used for containers and bulk for regular supply (like refineries).

• Bareboat charter: this contract is used to hire an entire “bare” vessel (not just the service it provides). The bare boat charterer is often a ship operator or vessel management company who leases the ship of a bank or ship owner and they become the “demise owner” of the vessel. The charterer must place his own crew on board and maintain class for the trades he want to employ it in. The charterer is also responsible for maintaining the vessel – basically as if the vessel were his own. Often the charterer will be able to re-register the vessel in another flag if he/she so chooses. These arrangements are often very long term. The owners receive a daily rate of hire in return, like hiring a rental car without a driver from the rental company.

Every charter party can be different, but the most important clauses are:

• Always Afloat / NAABSA, Safe Port, Safe Berth
• Delivery, Redelivery of the vessel
• Time allowed for loading / discharging (voyage charter party only)
• Communication procedure
• Conditions related to financing of the vessel or cargo
• Speed warranties (time charter party only)
3.2 Always Afloat, Safe Port, Safe Berth

A charterer’s primary obligation is to operate the vessel only to ports and seas which, at the time the order is given, are prospectively safe (i.e., at the time the vessel will arrive).

Secondary: if the primary obligation has been complied with but the port becomes unsafe, then the order must be cancelled and a new safe port ordered. In other words, the Charterer has to warrant to the owner the safety of the place to which he or she intends to send the vessel.

The charterer usually nominates the vessel to a berth; this nomination specifies that the nominated berth is safe. Therefore, generally, the risk of a port or berth being unsafe is very often primarily for the charterer. The greater the degree of liberty which the charterer enjoys to choose the port, the greater the necessity to imply a warranty of safety. Where, on the other hand, the information given about the intended port is more specific, it is more natural to conclude that the owner has satisfied himself as to its safety, or is prepared to take the risk of its unsafety.

The charterers’ obligation can be absolute, or limited only to exercise a due diligence (mainly in oil majors’ own charter party forms)

Based on a series of court judgements under common law a widely accepted legal definition of a(n) (un)safe port under common law is the following:

“A port will not be safe unless, in the relevant period of time, the particular vessel can reach it, use it and return from it without, in the absence of some abnormal occurrence, being exposed to danger which cannot be avoided by good navigation and seamanship.”

The port must be safe to USE in terms of its location, service, size and layout for the particular vessel to use this port at the relevant time. A port that is safe to enter is not considered safe if the vessel is unable to remain berthed in the port. However, if a vessel is able to leave the port safely if the conditions in the port become unsafe at a certain moment in time, then the port is not considered unsafe – however the necessity to depart must be predictable and the vessel must be able to take the necessary action in a safe manner and in good time.
There must be a system of local warnings in place to inform the master about the imminent onset of bad weather or adverse circumstances. Local information must be passed on to the master.

Even if an adequate warning system is in place, this will not be sufficient if the vessel is trapped by lack of sea room and unable to escape – e.g. because other vessels or circumstances in the port prevent the vessel from leaving.

This also applies to as to what could be regarded as an abnormal occurrence. Just as an example: a severe north west gale might not be an abnormal occurrence, even if such a gale would occur, on average, less than every two years, because such a gale is a part of the local weather system. However, a hurricane might not be and thus may be regarded as abnormal.

Also if a berth is obstructed in some way or a mooring facility is inadequate (e.g. a missing mooring buoy) in such a way that it is dangerous for the vessel then the port is considered unsafe.

The same applies to efficient aids to navigation such as pilots, buoys and lights and the availability of suitable tugs.

The foregoing means that a charterer at the moment that he or she selects a vessel for the intended voyage(s) (i.e. prior to the conclusion of a charter party) should obtain information on the following:

- Restrictions based on depths and dimensions
- Specific conditions that may be relevant for the intended call
- Availability of nautical services
- Availability of information when the vessel is entering port

It has to be underlined that the above four requirements are, also according to case law, part of the general ‘safe port’ requirement.

As a consequence, because of the safe port/berth warranty that a charterer has to give to the vessel owner under a charter party, a charterer must select a load port / terminal and discharge port / terminal for the intended voyage(s) which are able to comply with these requirements.
The Charterer is responsible for this information.
For a port to be a safe port in the context of a charter party, it should be easy for a charterer to find the information that he needs in order to consider if a port is safe. It is not sufficient for the information to just be somewhere. This is pull information.

3.3 Delivery, Redelivery of vessel

Agreement on when the vessel needs to be delivered by the owner to the charterer: Laycan (laydays cancelling): vessel must arrive at agreed location as per the charter party between lay days and cancelling date and render a notice of readiness to the charterer; meaning the vessel is ready in all respects for cargo operations. This is the so called “approach or ballast voyage”. If the vessel does not arrive within this period, the charterer has the right to cancel the charter party and look for another vessel.

For voyage charter parties: after loading the cargo in the load port under common law, and in most other jurisdictions, and under most charter parties, the master has an obligation to proceed on the voyage to the discharge port with due despatch, i.e. without reasonable delay, without deviating and with the charter speed as agreed in the charter party. Clear wording in charter parties, bills of lading and other contracts of carriage is needed to protect owners from claims for breach of the due despatch obligation. As there may be mandatory national laws that cannot be overridden, an indemnity provision in favour of the owners is also required.

If a virtual arrival scheme has been implemented, the owners can tender a valid NOR before the vessel is an arrived vessel. It allows a master to adjust speed to arrive at the port of destination.

Other charter parties (e.g. time charter party) allow the charterer to adjust speed for e.g. Just In Time arrival.

After arriving at the discharge port (depending on the terms), tendering NOR and completing the last discharge (last hose or arm), the vessel will be redelivered by the charterer to the owner, so the vessel can proceed to the next charterer, to arrive again between lay and cancel date. Or, if the vessel does not have a new charter yet, follow orders of the owner (e.g. bunkering, anchoring, repairs or steam up to a new area)
3.4 Time allowed for loading / discharging (voyage charter party only)

Laytime specifies the number of hours allowed to load/discharge cargo after tendering Notice Of Readiness. More hours used by cargo operations result in demurrage costs to be paid by charterer to owner. Less hours used for cargo operations result in despatch; in the bulk industry paid by owner to charterer, in the tanker industry this is less common.

More hours used due to e.g. engine or cargohold failure will cause demurrage to be paid by owner to charterer.

3.5 Communication procedure

Instruction to the Master to provide updates regarding Estimated Time Of Arrival, xx hours before arrival. Normally “narrowing down” (frequency of updates increases) when the vessel gets closer to the Port of destination.

3.6 Conditions relating to the financing of cargo or vessel

Clearances might be needed from the banker and insurer of the vessel if e.g. the locations of the berths are not within the conditions (e.g. within pirate areas).

Clearance might also be needed from the banker of the cargo if e.g. the type of vessels is not within the conditions.

3.7 Speed warranties (time charter party only)

Agreements on minimum or maximum speeds, possibly specified for ballast or laden conditions
3.8 Visualization of voyage charter party

**Voyage Charter** today

- Ballast voyage
  - At sea
  - Not chartered
  - Adjust speed to meet laycan of charterer
- Laytime
  - In load port
  - Chartered after tendering NOR
  - Waiting for berth
- Laden voyage
  - At berth
  - Chartered
  - Complete loading
- Laytime
  - In discharge port
  - Chartered
  - Due despatch
  - Soil with charter speed
  - Waiting for berth
- *01
- *02

**Voyage Charter** future

- Ballast voyage
  - At sea
  - Not chartered
  - Adjust speed to meet RTA
- Laytime
  - In load port
  - Chartered
  - Tender Virtual NOR
  - Adjust speed to meet RTA
- *01
  - Despatch - Paid by owner to charterer
- *02
  - Demurrage - Paid by charterer to owner
4 Port information

4.1 General

This information covers the route from pilot boarding place up to the berth. The port authority is not a party to the charter party. However, if in a dispute between the charterer and the owner a court rules that the port was not safe because certain relevant information was not available, this may impact the reputation of the port. The impact may be limited if it concerns a particular vessel at a particular time. However, if it concerns a general issue (e.g. not establishing an early warning system) that impact any vessels at any times this will affect all charterers making use of the port.

Not every port is aware of this, so port information is a grey area, and the availability of relevant information is often depending on the local port authorities or pilots. Safe port access does include arriving and safely laying alongside at the berth. The port authority looks at the berth aspect from a holistic port view: will the vessel remain alongside safely and will other vessels be able to reach other berths safely (see also berth information)

When it comes to port safety, masters have an overriding authority over orders from commercial operators (charters) and also over his owners – the ISM code is very specific about the master’s overriding authority.
The master is always under the orders of the local coastal state authorities within the limits of their jurisdiction (territorial waters, port limits). Responsibility remains with the master.

Port information should include:

- Restrictions based on depths and dimensions
- Specific conditions that may be relevant for the intended call
- Availability of nautical services
- Availability of information when the vessel is entering port

4.2 Restrictions based on depths and dimensions

From the pilot boarding place to the berth:

- Maximum length
- Maximum beam
- Maximum draught with or without over the tide operations
- Maximum air draught
- Maximum arrival displacement

At the berth:

- Maximum length
- Minimum parallel mid body alongside
- Maximum beam
- Maximum draught with or without over the tide operations
- Maximum air draught
- Maximum displacement on arrival
- Maximum displacement alongside

In particular maximum draught information is difficult to get or agree on. It depends largely on the minimum depth information, which is difficult to get as depth information might be maintained by different parties: e.g. the port entrance and waterways by the national authority, and the port basins by the port authority.
In the end if the maximum dimensions and conditions from pilot boarding place to berth causes conflicts with the maximum dimensions at the berth, it will result in contractual consequences for the terminal if they've accepted the vessel to berth.

Maximum draught information needs to come with information about the available depth, height of tide, water density, under keel clearance and bottom type, as it will allow the master to judge whether this maximum draught is in line with the instructions of the owner or charterer (e.g. minimum under keel clearance). A breach of the under keel clearance policy might even result in a bottom survey, or in worst case scenario in a docking for bottom inspection and/or repairs.

4.3 Maximum conditions for the vessel

Port safety is not absolute. One-and-the-same port may be safe for one vessel, and at the same time be unsafe for another vessel, or ports may be temporary unsafe. Therefore the maximum conditions are provided for a specific vessel or group of vessels, defined by their specific type, size, direction of travel and other factors specific to a vessel’s planned manoeuvring:

- Horizontal / vertical tide restriction
- Wind restriction
- Visibility restriction
- Ice restriction
- Sea state restriction, i.e. swell
- Extra measures necessary for the safe handling of the vessel under the conditions specified

4.4 Availability of nautical services

- VTS
- Pilots
- Tugs
- Linesmen
- Special mooring equipment
4.5 Information when the vessel is entering port

Information to a vessel at the moment of the vessel entering the port:

- Early warning system
- Contingency plans (after running into an unsafe situation)

Part of the safe port requirement (under the charter party) is that call specific information, i.e. relating to the nautical and other safety aspects of the port and the berth at the moment of the vessel entering the port is conveyed to the master of the vessel. E.g. maximum tidal conditions or available services or equipment. This information should be obtained directly from the port authority or via the local agent.

Furthermore, because hardly any port is always safe under any circumstance for every vessel, the safe port requirement (under the charter party) includes that a notification system should be in place to advise the vessel’s master timely whether / when the port or berth may become unsafe at a particular moment and to advise to take the proper measures to avoid or mitigate an unsafe situation.

Finally, for situations during the vessel’s entering, stay or leaving that could result in an unsafe situation (according to the safe port requirement under the charter party) the port should have contingency plans and should be able to give the master a proper advice how to best cope with the situation at hand.
5 Berth information

5.1 General

Only related to dangers specific to the nominated berth to ensure safe vessel – berth compatibility. It does not provide commercial vessel – shore compatibility: e.g. sizes of manifolds, back pressures etc. It also does not provide information that covers the safety of the approach.

The owner of the berth information might be the terminal or the port authority, depending who has constructed or operates the berth. The depth might be maintained and surveyed by the terminal via a contracted private party, or by the port authority. Especially in ports with a land lease construction the latter is the case.

The berth operator has a different view on the maximum sizes alongside than the port authority: the berth operator is concerned whether the vessel is compatible with the berth and don’t cause damage to the berth construction. The port authority has similar concerns, but on top of this the safe passage of other vessels to other berths through the port and further land inwards should not be hampered by the vessel alongside, in line with safe port requirements.
Maximum sizes of loading equipment is not part of the berth information – as this is related to the commercial operation of the vessel by the charterer, not to the safe operation by the owner.

Berth information should include:

- Maximum sizes of the vessel
- Maximum conditions for the vessel
- Availability of nautical services
- Information when the vessel is berthing
- Mooring arrangement

5.2 Maximum sizes of the vessel

Maximum sizes of the vessel:

- Maximum length
- Minimum parallel mid body alongside
- Maximum beam
- Maximum draught with or without over the tide operations
- Maximum air draught
- Maximum arrival displacement
- Maximum displacement alongside

5.3 Maximum conditions for the vessel

Restrictions to a vessel defined by their specific type, size, and other factors specific to a vessel while alongside:

- Horizontal tide restriction
- Vertical tide restriction
- Wind restriction
- Visibility restriction
- Ice restriction
- Sea State restriction, i.e. swell
- Extra measures necessary for the safe handling of the vessel under the conditions specified
5.4 Availability of nautical services

- VTS
- Pilots
- Tugs
- Linesmen
- Special mooring equipment

5.5 Information when the vessel is berthing

Information to a vessel at the moment of the vessel coming alongside a berth

- Early warning system
- Contingency plans (after running into an unsafe situation)
6 Contract of sale of goods (bulk) or Contract of carriage (container)

6.1 Bulk

After signing the charter party, the final contract of sale of goods can be signed. Followed by:

- Assignment of survey company: responsible for tank and cargo inspections
- Assignment of vessel and cargo agent. The main function of the agent is representing the owner, charterer or cargo owner in a port. The agent acts as a middleman and is representing the captain and his shipping company, responsible for notifications and declarations to port authorities, customs, immigration, efficient rotation of the vessel, and paying port dues to port authorities. The agent might be the owner’s or the charterer’s agent. Two different agents might be appointed to the same vessel.

From here the cargo operator communicates load and discharge windows to terminals, buyer and cargo inspectors.

The vessel operator communicates voyage orders to captain, vessel agents and cargo inspectors.
6.2 Containers

Normally this trade is dominated by a consignor, the owner of the goods who offers the containerized goods to be transported to a carrier.

The contract of carriage between the carrier of goods or passengers and the consignor, consignee or passenger specifies:

- Rights, duties and liabilities of parties to the contract
- Addressing topics such as acts of God and including clauses such as force majeure

Parties who might act as intermediaries between the consignor and the carrier are freight forwarders. When a product has to be moved from the factory to the quay in a port, the whole transportation has to be arranged. Usually the consignor will assign a freight forwarder, who will take on this responsibility of transporting the goods. The freight forwarder will procure the actual transportation to one or more “performing carriers”, the ones who truly transport the goods.

In such case there is a forwarding contract between consignor and freight forwarder, and a contract of carriage between freight forwarder (on behalf of the consignor) and carrier.

6.3 Contract related documents

- Bill of Lading (B/L) Document issued by carrier to vessel/consignor and consignee (receiver of goods). Functions of B/L: receipt of the goods, evidence of the contract of carriage, document of title to the goods
- Time sheets: describes exact times of commencing and completion of operations, and describes laytime computation and cargo quantities
- Statement Of Facts
- Letter of Protest
7 Contract for hiring terminal services

In case there is no fixed contract with the discharge terminal, a tank storage contract or terminal service agreement needs to be signed between the cargo buyer or seller and the terminal.

The terminal service contract specifies:

- Tariff per m³ for services to be provided (free time, storage time)
- Quantity of goods to be stored
- Number of calls or hours alongside
- Communication procedure to provide a berthing window xx hours before arrival
- Agreements regarding demurrage (regardless if the vessel is under time or voyage charter, under voyage charter often a back to back)

The charterer nominates a vessel to a terminal. If the terminal accepts the nomination, it accepts the vessel comes alongside her berth.

Before accepting the nomination, the terminal does a vessel-berth compatibility check, not only if the vessel can lie alongside safely (safe berth), but also if the berth can be used commercially (e.g. manifold diameters, or if there is sufficient storage capacity). This is push information.
The terminal is normally not checking if the vessel can sail safely from pilot boarding place to berth – this is assumed to be checked by the port authority.

7.2 Containers

Containers may contain commodities, but mostly customer products. Unlike in the commodity trade, in the customer products the carrier has a contract with the terminal. Specifying:

- Windows per service, ETA Berth and ETD Berth
- Expected Berth Moves Per Hour (BMPH)
- Tariff per container
- Number of hours before ETA Berth containers can be delivered to the terminal (cargo cut)
- Number of hours after ETD Berth containers may remain at terminal
- When stowage list must be available to the terminal
8 Land Lease Contract

8.1 Land Lease Contract

A land lease contract is a contract between terminal and port authorities. Not all ports have a land lease construction – ports may also be completely private or public ports.
9 Passage Planning

9.1 IMO

According Chapter V Regulation 34 requires the voyage to be planned in accordance with IMO guidelines: the master shall ensure that the intended voyage has been planned using the appropriate nautical charts and nautical publications for the area concerned, taking into account the guidelines and recommendations developed by the Organization: referring to A.893(21). Such planning result in so called “passage plans”, documents describing the passage from berth to berth. The significance of this activity is highlighted by the fact that most accidents happen between the pilot boarding place and the berth. However, passage planning is made more difficult when the available information differs from source to source and the Master is faced with the task of selecting what is correct. Such decisions are being made prior to arrival in port, at a time when masters may have to make almost immediate executive and operational decisions.

9.2 Relation to chartering

Safe berth to berth passage planning starts with selecting the right vessel for the voyage during the chartering process. If the available berth and port information is not up to date or incorrect, safe berth to berth planning is much more challenging if
not impossible. Therefore the same up to date berth and port information used for chartering should ideally also be used for safe berth to berth navigation.

9.3 Information to be used

Masters must use authorized information nautical charts and publications. Masters must also use local information in conjunction with authorized publications of hydrographic offices. If the local information is using different standards than the authorized publications, it is almost impossible for the master to do so, e.g. if the depths of the port are displayed against a different chart datum than the nautical charts.

Pilots use port passage plans: plans from pilot boarding place to berth. These port passage plans are normally relayed during the master / pilot exchange, after the pilot has embarked the vessel.

9.4 Speed

Setting the correct speed is very important for fuel consumption and ensuring the vessel arrives at the right time and place. But other factors can play a role depending on the type of contract and cargo.

Under voyage charter party often the demurrage outweighs the extra fuel costs (apart from one has to sail with the agreed charter speed).

Apart from the type of contract, delays in load and discharge ports are possible. When sailing to a load port: the cargo may not yet be available or the berth may be occupied by a previously delayed vessel.

When sailing to a discharge port the tank to discharge the cargo in may not yet be available or again the berth may be occupied by a previously delayed vessel. Or the vessel might have to speed up: if refining has to close down, that would costs so much more than that what you can potentially save by having a vessel arrive one day late. Apart of all this: the discharge port can change several times during a voyage if the cargo is sold to a different party (the value of the cargo is a more important variable than the fuel cost)
10 Nautical charts and publications

Electronic Navigational Chart (ENC)

10.1 Publishers

Nautical charts and publications are published by the national hydrographic office of the port concerned, so called “authorized publications”. The national hydrographic office is often a part of the national authorities, often a navy department. The national hydrographic office might have a contract with the United Kingdom Hydrographic Office (UKHO) for using the information in their charts and publications, as the national hydrographic office might not have the resources to print them.

10.2 IMO

According to IMO Solas Chapter V, regulation 9: contracting governments undertake to arrange for the collection and compilation of hydrographic information and the publication, dissemination and keeping up to date of all nautical information necessary for safe navigation.
11 Estimated Time of Arrival Berth

11.1 General

The ETA Berth is normally sent by the master to the agent by e-mail, who is contracted by the charterer or owner, and is responsible for informing all parties ashore on behalf of the Vessel. Normally the update frequency increases (“narrowing down”) when the vessel gets close to its destination.

Note: The contract of carriage dictates which notices must be sent: so called port or berth charter – meaning does NOR start at the port (NOR at pilot boarding place / anchorage) or does NOR start at the berth. Most of the contracts are port charters.

11.2 Tramp shipping

Normally in tramp shipping vessels do not sail on a regular schedule. In line with the communication procedure in the charter party the master sends an Estimated Time of Arrival (ETA) to the terminal. If there are more parcels on board, the master will send an ETA Berth to each terminal (e.g. in a parcel tanker)
11.3 Liner shipping

Normally liner shipping operates with proforma schedule. However, the proforma schedule is in practice an indication of the rotation of the vessel. The exact dates and times are often not realised and may change due to prevailing conditions (e.g. canal transits, tidal restrictions and national holidays of ports called)

In liner shipping a vessel may also call at multiple terminals (e.g. feeders). In that case, the master will send an ETA Berth to each terminal.
12 Berth Planning – Requested Time of Arrival (RTA) Berth

Berth planning

12.1 General
Not all terminals have digital planning systems. Many terminals still work with Excel sheets, paper cards or just by telephone. To share this information digitally is a challenge. Recent developments such as cyberattacks will only reduce the eagerness of terminals to connect to other IT systems or infrastructures.

The RTA berth is a request of the terminal to the vessel to come alongside at a particular berthing position at a particular time and is based on the planning of multiple vessels at the berths of the terminal.

12.2 Tramp shipping
The terminal is not a party to the charter party. However, the charterer is mostly linked to the terminal through the terminal service contract, so demurrage could be on the account of the terminal. Therefore the terminal operator might prioritize a vessel which causes less demurrage costs versus another vessel – being the reason why terminal planning can be considered as sensitive information. In tramp shipping the RTA berth is often called a “nomination”. Normal practise is “first come first serve”.

Berth planning
12.3 Liner shipping

If the terminal is only serving one customer, the planning is normally not sensitive. However, if the terminal is serving more customers (i.e. a so called multi-user terminal), or even a customer who owns the terminal, that customer might be given preference over another customer – making the information sensitive. Normal practice is “first come first serve”.
13 Planned Time of Arrival (PTA) Berth

Planned Time of Arrival as used on Electronic Chart Display Information System (ECDIS)

13.1 General
If the vessel / agent / marine team accepts the RTA berth of the terminal, it becomes the PTA berth of the vessel.

13.2 Tramp shipping
The vessel might receive multiple RTA’s of several terminals. The vessel accepts the RTA berth of one terminal. That choice can depend on commercial and safety considerations, e.g. which parcel is needed most at which terminal or a quick port rotation. Also restrictions in the port rotation (e.g. due to draught) may have an impact.

13.3 Liner shipping
The vessel might receive multiple RTA’s of several terminals. The vessel selects the right rotation which results in the shortest and safest port stay.
14 Estimated Time of Arrival (ETA) Pilot Boarding Place

14.1 General
In line with local port regulations, the vessel must advise the ETA pilot boarding place. Based on the PTA berth the ETA pilot boarding place is advised. The vessel (via agent) must also order nautical services, like pilots, tugs and linesmen. These services might need a minimum notice. Changing the time after this minimum notice might result in financial consequences or unavailability at the time the services are required.

Note:
The contract of carriage dictates which notices must be sent: so called port or berth charter – meaning does NOR start at the port (NOR at pilot boarding place / anchorage) or does NOR start at the berth. Most of the contracts are port charters.

14.2 Tramp shipping
The ETA pilot boarding place might be sensitive in tramp shipping, as it impacts the Notice of Readiness.
14.3 Liner shipping
The ETA pilot boarding place is not sensitive in liner shipping.
15 Port Planning – Requested Time of Arrival (RTA) Pilot Boarding Place

15.1 General

Based on the ETA pilot boarding place (based on PTA berth), the port authority provides a RTA pilot boarding place, taking into account:

- Maximum sizes of the vessel
- Maximum conditions for the vessel
- Cross check on berth availability
- Availability of the fairway
- Availability of the nautical services
- Clearances of other authorities, e.g. customs, immigration etc.

If the RTA pilot boarding place is not aligned with ETA pilot boarding place, it is important to explain whether this is due to act of God or due to lack of nautical services – as this might stop or shorten discussions regarding who’s picking up the bill for delays.
16 Planned Time of Arrival (PTA) Pilot Boarding Place

16.1 General

If the vessel accepts the RTA pilot boarding place of the port authority, it becomes the PTA pilot boarding place of the vessel.
17 Nautical service planning

17.1 General

Nautical services are VTS, Pilots, Tugs and Boatmen/Linesmen.

17.2 Vessel Traffic Service (VTS)

VTS is a service implemented by a competent authority to improve the safety and efficiency of vessel traffic and protect the environment. The service interacts with the traffic and respond to traffic situations developing in the VTS area. Based on the traffic situation VTS may e.g. ask the vessel to heave up anchor and proceed to the pilot boarding place.

17.3 Pilots

Pilots advice the Master regarding navigation from pilot boarding place to berth and vice versa. Pilots need a certain notice in order to render their service in time – normally with a minimum of 2 or 3 hours, but sometimes as much as 6 hours. All depending on the location where the service is needed versus the location of pilot station, or whether pilots with special skills are needed (e.g. for deep draught vessels).
17.4 Tugs

Tugs assist the vessel with manoeuvring, often directed by the pilots, from rendez vous point to the berth and vice versa. Tugs need a certain notice in order to render their service in time – normally with a minimum of 2 or 3 hours, but sometimes as much as 24 hours. All depending on the location where the service is needed versus the lay by berth of the tugs. Some tugs may need to come from other ports or islands.

17.5 Boatmen/Linesmen

Boatmen/Linesmen assist the vessel to secure the mooring lines when the vessel comes alongside. Boatmen/Linesmen in general need less notice, as their stations are normally close to the berths.
18 Clearances

18.1 General

Clearances are given by local (port) authorities to the vessel. Typical clearances come from customs, immigration, port health, port authorities. Some clearances are needed prior to entering port (e.g. health), other prior to the start of operations (e.g. customs) – therefore the timing of such clearances versus the arrival or departure time of the vessel are very important.

Certain services also need to be reported to authorities, e.g. MARPOL related issues (waste collection), bunkers, or vessel repairs (e.g. main engines).
19 Actual Time of Arrival Pilot Boarding Place

Pilot tender coming alongside for pilot boarding

19.1 General

Actual times are normally reported by the captain in the vessel’s logbook. However, such times could also be derived from AIS information.

19.2 Tramp shipping

In order for (disponent) owners to start the lay time clock the vessel must have arrived at the agreed destination, be ready in all respects and the owners must tender a valid Notice of Readiness to the charterers. Whether a vessel can be considered an arrived vessel or not depends on the terms of the charter party. If the charter party specifies a certain berth then the vessel must have reached that berth in order for the lay time to start.

If the charter party just names a port then the vessel is arrived if it is within the port, at the immediate and effective disposition of the charterers.
19.3 Liner shipping
The ATA pilot boarding place is normally not sensitive in liner shipping.

19.4 Image of arrival times Pilot Boarding Place
20 Actual Time of Arrival Berth

Linesmen handling mooring lines

20.1 General

The ATA berth is often discussed: is it first line, last line, etc. In line with the international regulations for preventing collisions at sea (1972), rule 3(i): The word “underway” means that a vessel is not at anchor, or made fast to the shore, or aground.

In line with this definition the ATA berth is First Line secured.

The start of mooring services is often defined as First Line Ashore (any line, including heaving line).

Note: this time is not related to the start of lay time, which normally is “All Fast”.

20.2 Image of arrival times berth
21 Vessel and Cargo service planning

21.1 General

Alongside planning is for 99% depending on the completion time of all critical services. Critical services are services which need to be completed before departure. Non critical services might be rendered in the next port.

Depending on whether the vessel will call at one or multiple berths, or whether terminals allow cargo and bunker operations at the same time, the timing and locations of services is very important.

Services might or might not be ordered via the agent. If services are not ordered via the agent, the service provider might not be updated on arrival or departure times.

21.2 Cargo services – Bulk

Cargo services are often ordered by the charterer.

In the bulk industry, in the charter party there is an agreement on lay time: number of days, hour or tons per day allowed by vessel owner to charter to load and / or discharge after NOR (as per charter party)

Demurrage is paid by charterer to vessel operator/owner if operations take more time (loose time or time lost) . Despatch is paid by vessel operator /owner to charterer if operations take less time (catch up time or time made good)
Terminals do not always have a vested interest to allow the vessel to depart as soon as possible. If the terminal is completing cargo operations within the lay time of the vessel, and there is no vessel waiting at the anchorage, the terminal won’t have a financial incentive to complete cargo services more quickly.

An important service for the bulk trade is the cargo survey. The cargo surveyor determines the quantity and quality of the cargo loaded or discharged as per sales of goods contract.

### 21.3 Cargo services- Containers

The completion time might vary depending on the number of cranes allocated to the vessel. The completion time can change quickly, as changing the number of allocated cranes has a large impact on the completion time. Depending on the clauses in the terminal service contract, the terminal pays a fine to the carrier if operations have not been completed in time.

### 21.4 Vessel services

Many different services might need to be rendered to the vessel: bunkers, waste collection, provisions, consumables, medicines, repairs, maintenance etc. Services might be ordered through the owner or the charterer, depending on the type of charter party. E.g. bunkers are ordered by the owner for vessels under voyage charter party, and by the charterer for vessels under time charter party. Spare parts for main engines are normally ordered by the owner (or via the superintendent). Consumables and provisions might be ordered by the superintendent (on behalf of the owner) or by the master. Depending on whether the agent represents the owner, charterer and if services are ordered directly or via the agent, the agent might or might not be informed about these services and when they are expected to arrive at the vessel.

### 21.5 Planning start services

For planning of the starting time of vessel services, the same methodology applies as for planning the vessel.
The service provider renders an Estimated Time of Start (ETS) of the specified service. Based on the ETS, the vessel will send a Requested Time Start (RTS), based on planning of crew rest hours, sequence of bunkering low and high sulphur bunkers, or position of cranes.

If the service provider accepts the RTS of the vessel, it becomes the Planned Time to Start (PTS) the service.

21.6 Planning completion services

For planning completion time of vessel services, the same methodology applies as for planning starting times.

The service provider renders an Estimated Time of Completion (ETC) of the specified service. Based on the ETC Start, the Vessel might send a Requested Time Completion (RTC) based on planning of cargo services, or based on a tidal window that the vessel needs to meet. If the service provider accepts the RTC of the vessel, it becomes the Planned Time to Complete (PTC) the service.

21.7 Image of times alongside
22 ISPS

22.1 General

All vessels over 500 GRT (of signatories of the convention) operating in international trades, as well as the ports that service them must comply with ISPS. All services provided to the vessel must be identified for security reasons. If services arrive over land, most of the time the terminal is also involved, as they need to pass the gate of the terminal. If services arrive over water, only conditions of the vessel security plan are involved.
23 Maritime Labour Convention (MLC)

On all vessels (of signatories of the convention) the master has to comply with the Maritime Labour Convention, taking care of wages, food, outfitting of cabins, but most important to the port call process: the rest hours of the crew. Therefore it is important for the vessel to understand which services are coming when, avoiding unnecessary waiting hours of the crew. In turn, it benefits the service provider if the crew is standing by on their arrival.
24 Estimated Time of Departure (ETD) Berth

Linesmen handling mooring lines

24.1 General

In line with local port regulations, the vessel must advise the Estimated Time of Departure from the berth. The vessel (via agent) must also order nautical services, like pilots, tugs and linesmen. These services might need a minimum notice. Changing the time after this minimum notice might result in financial consequences or unavailability of the services at the intended time of departure.

24.2 Tramp shipping

The ETD is normally not sensitive.

24.3 Line shipping

The ETD is normally not sensitive.
25 Requested Time of Departure (RTD) Berth

Based on the ETD berth the port authority provides a RTD berth taking into account:

- Maximum sizes of the vessel
- Maximum conditions for the vessel
- Availability of the fairway
- Availability of the nautical services
- Clearances of other authorities, e.g. customs, immigration etc.

The RTD berth is a request of the port to the vessel to depart from the berth.
26 Planned Time of Departure (PTD) Berth

Planned Time of Departure on Electronic Chart Display Information System (ECDIS)

26.1 General

If the vessel accepts the PTD berth of the port authority, it becomes the PTD berth of the vessel.
27 Actual Time of Departure Berth

27.1 General

The Actual Time of Departure Berth is often discussed: is it commence unmooring, last line, etc. In line with the international regulations for preventing collisions at sea (1972), Rule 3(i): The word “underway” means that a vessel is not at anchor, or made fast to the shore, or aground.

In line with this definition the Actual Time of Departure is Last Line released.

27.2 Image of departure times berth

![Departure Time Berth Diagram]
28 Actual Time of Departure Pilot Boarding Place

28.1 General

Same as in chapter 9, passage planning is again compulsory for all vessels.

28.2 Tramp shipping

Under common law, and in most other jurisdictions, and under most charter parties, the Master has an obligation to proceed on the voyage with due despatch, i.e. without reasonable delay and without deviating. Clear wording in charter parties, bills of lading and other contracts of carriage is needed to protect owners from claims for breach of the due despatch obligation. As there may be mandatory national laws that cannot be overridden, an indemnity provision in favour of the owners is also required.

After arriving at the last discharge port, rendering NOR and discharging cargo, the vessel will be redelivered to the owner, so the vessel can proceed to the next charterer, to arrive again between lay and cancel date. (for voyage charter party only)
28.3 Liner shipping

Normally line shipping operates according to a pro format schedule so the arrival time at the next port is already planned.