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Ship to Ship Transfer



SHIPS

Ship to Ship Transfer

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Introduction

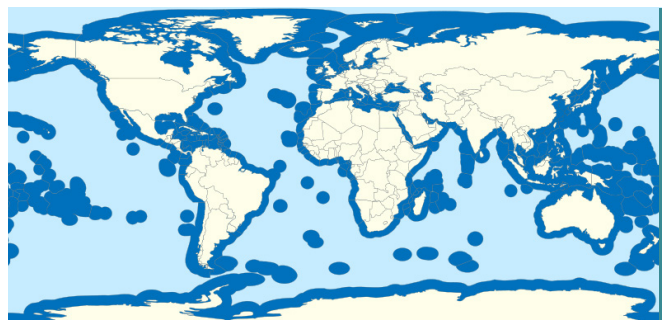
Ship-to-ship transfer (STS) of cargo has been performed for many years. The major attraction of STS is that it provides flexibility for the cargo owner at relatively low cost. STS operations are therefore becoming more popular, in various regions of the world. One of the consequences of the increased frequency of STS operations is that the incidence of structural damage caused during manoeuvring prior to commencement of STS operations has increased. Most often, the damage has been of a minor nature, but could have been much worse if the circumstances had been only marginally different. These incidents have most frequently involved dry-bulk carriers. Investigations into the causes of the incidents have shown that the ships involved often embarked on STS operations without first conducting proper pre-planning and risk assessments. The main purpose of this Loss Prevention Briefing is therefore to advise Members on the steps that they can take to minimise the risks inherent in STS operations.

Liquid Cargo STS

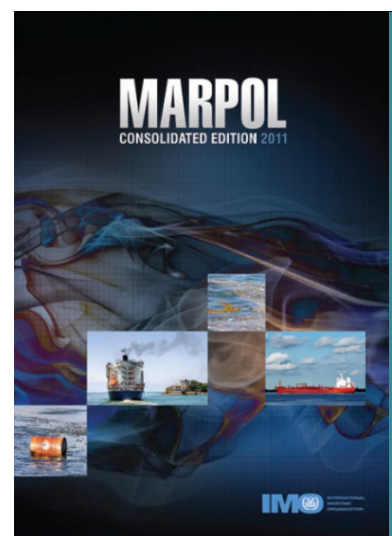
The first industry guide covering operational procedures applicable to STS of crude oil and products was published in 1975. This was followed by a guide recommending procedures for STS transfer of liquefied petroleum gases (LPG) in 1980. Both publications have been revised and updated over the years. In 2011 a guide recommending operational procedures for the transfer of liquefied natural gas (LNG) was published.

STS between oil tankers has a good safety record, with few major pollution incidents and only occasional significant ship damage. However, the operation is increasingly perceived as relatively high-risk. This is evidenced by the International Maritime Organisation's (IMO) 'high priority' resolution in 2005, intended to introduce a tighter regulatory framework for STS

via amendments to MARPOL Annex 1. The resolution requires that all STS operations between oil tankers take place within an Exclusive Economic Zone (EEZ), which can extend up to 200 miles from coastal baselines. The STS is under the reporting control of the applicable coastal state, which has the sanction of refusal in the event of a threat to the environment. An approximate representation of the World's EEZs is shown below, with the EEZs marked in dark blue:



The requirements and recommendations developed by the IMO are contained in MARPOL 78/73 Annex 1, Chapter 8, Regulations 40, 41 and 42, 'Prevention of Pollution During Transfer of Oil Cargo Between Oil Tankers at Sea'. These requirements became effective on 1st April 2012.



The latest 'Ship to Ship Transfer Guide for Petroleum, Chemicals and Liquefied Gases', published in 2013, was produced in line with the MARPOL amendments. As its title suggests, the guide contains recommendations that are intended to apply to all bulk liquid cargo transfers: crude oil and products, LPG, LNG, plus chemicals (MARPOL Annex II) cargoes.

For more information, please visit www.nepia.com    

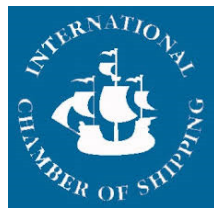
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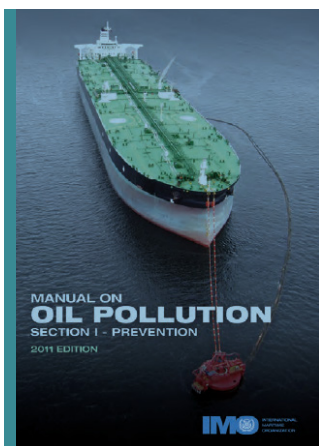
Ship to Ship Transfer (cont.)



The 2013 guide is sponsored by organisations representing the oil (Oil Companies International Marine Forum); chemical (Chemical Distribution Institute); gas (Society of International Gas Tanker and Terminal Operators) and shipping (International Chamber of Shipping) industries.



The MARPOL Annex 1, Chapter 8, regulations mentioned above, also require that all oil tankers of 150 GT and above, engaged in the transfer of oil cargo between oil tankers at sea, must carry on board a plan prescribing how to conduct STS operations. This STS Operations plan, which has to be approved by the ship's Flag State administration, is developed taking into account the best practice guidelines for STS operations contained in the IMO 'Manual on Oil Pollution, Section 1, Prevention'.

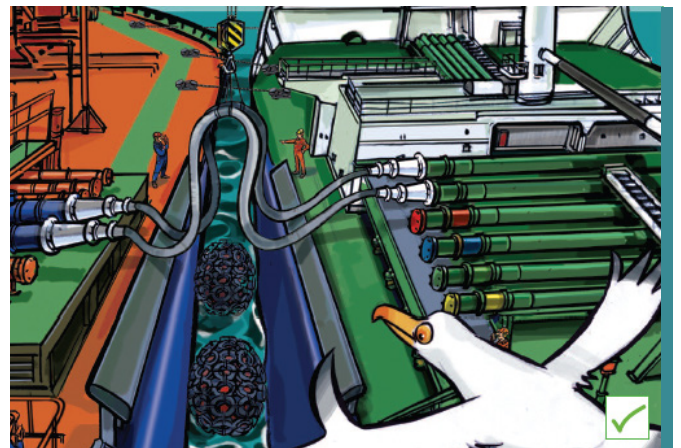
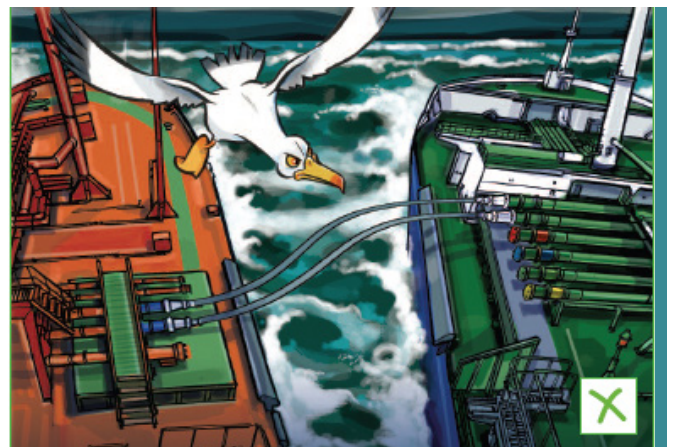


Some of the major classification societies produce draft STS operations plans and advisories. The ABS model plan can be accessed via the following link:

ww2.eagle.org/content/dam/eagle/rules-and-resources/forms/STS-Transfer-Operations-Plan.doc

These plans are in generic format and are intended to be adapted on a ship-by-ship basis. The finalised, approved, plans may be incorporated in the ship's safety management system (SMS).

Members who operate tankers that engage in STS operations will be familiar with much of the above. They may also recall the poster published by North as part of the 'Clean Seas' series, which compared 'bad' and 'good' STS transfer of liquid cargo:



The poster highlighted the requirement for tankers engaged in STS operations to have:

- An approved STS operations plan in place
- A properly qualified person in overall advisory control
- Properly briefed and trained personnel on deck
- All STS equipment properly rigged and maintained.

Ship to Ship Transfer (cont.)

Dry cargo operators, however, may have had no previous exposure to STS regulations and documentation and this Loss Prevention Briefing is more particularly aimed at Members operating dry-cargo ships that may now, or in the future, engage in STS operations.

Liabilities between Vessels

Before considering dry cargo STS in more detail, we will briefly touch on how the previously litigious nature of STS damage claims was tempered by a legal judgment in the Hong Kong High Court in 2009. Traditionally, damage claims arising out of STS operations were treated on a 'knock-for-knock' basis, with each party bearing the repair costs for their own vessel's damage, regardless of who was responsible for causing that damage. In more recent years, there were attempts to apply the International Regulations for Preventing Collisions at Sea (Colregs), or no-fault liability to STS damage claims.



In these 'Colregs' cases, it was incumbent upon the vessel that was making the allegation that there had been an infringement of the Colregs, to also prove that such an infringement was triggered by negligence on the part of the other vessel and that negligence caused, or at least contributed to, the event which led to the damage. However, neither of the above concepts fitted easily into the factual or legal relationships in STS.

In the Hong Kong judgment, the court held that the claimant vessel faced a high burden of proof in establishing the necessary causative negligence before such a claim can even be considered. The court decided that, even with high standards of skill and care, STS operations are potentially hazardous where accidents can occur.

The court ruled that if an incident was an accident where there was no causative negligence, then there was no basis for any legal claim between the vessels involved. The correct approach in such cases, where causative negligence could not be shown, was therefore a 'drop hands' settlement – where each party bore their own costs.

The judgment was noteworthy in that it emphasised the concept of the 'accident', which in this case took precedence over the standard of strict liability – where the vessel causing the damage is legally responsible regardless of fault, negligence or intention.

Full details of the case can be found at: https://legalref.judiciary.hk/lrs/common/search/search_result_detail_frame.jsp?DIS=66472&QS=%2B&TP=JU

Dry Cargo STS

The legislation and guidelines covering STS operations involving liquid cargoes is extensive, as we have seen above. However, there are no specific international guidelines for dry cargo STS operations, even though dry cargo; particularly dry bulk, STS transfer operations are occurring more frequently and in more locations than in the past.

As previously stated, this is because cargo owners have increased flexibility with low financial outlay. There is also the factor that ship size has increased at a greater rate than port development – resulting in transportation bottlenecks. This has given rise to an increase in the number of transshipment operations and locations; as well as an increase in the number of specialist firms offering STS expertise and equipment. Many of these operators provide their clients with first class service. A few, however, do not.

The following table lists what might constitute the differences between good and bad STS operations. In the sections that follow the 'good versus bad' table, we will look at the ways Members can turn potentially bad STS operations, fraught with risk and danger, into good STS operations that are well thought out and where the risks are lowered to manageable levels.

Ship to Ship Transfer (cont.)

Good STS		Bad STS	
STS clauses inserted in charterparty		No STS clauses	
No LOI required from Owner indemnifying STS provider		LOI from Owner indemnifying STS provider	
Parties agree on STS methodology etc.		No discussion on STS provider etc.	
Full discussion & risk assessment		No communication between parties	
Local regulations in place and complied with.		No local regulations and no self-governance	
All STS equipment certified and maintained		No certificates and poor maintenance	
All personnel trained, experienced and competent		Personnel have little or no STS experience	
Well-developed contingency plans		No contingency plans	
Cargo documentation fully compliant and up-to-date		STS-specific cargo documentation non-existent.	

Charter Party Clauses

Whenever a Charterer wants to have the option of performing loading/discharging operations by STS transfer there should be a suitable clause entered in the governing charterparty clearly stating the responsibilities between the contractual parties.

BIMCO have drafted a clause for time charterparties that is relevant for both dry and liquid cargo trades. **CLAUSE**

BIMCO Ship to Ship Transfer Clause for Time Charter Parties

- (a) The Charterers shall have the right to order the Vessel to conduct ship to ship cargo operations, including the use of floating cranes and barges. All such ship to ship transfers shall be at the Charterers' risk, cost, expense and time.
- (b) The Charterers shall direct the Vessel to a safe area for the conduct of such ship to ship operations where the Vessel can safely proceed to, lie and depart from, always afloat, but always subject to the Master's approval. The Charterers shall provide adequate fendering, securing and mooring

equipment, and hoses and/or other equipment, as necessary for these operations, to the satisfaction of the Master.

- (c) The Charterers shall obtain any and all relevant permissions from proper authorities to perform ship to ship operations and such operations shall be carried out in conformity with best industry practice.
- (d) If, at any time, the Master considers that the operations are, or may become, unsafe, he may order them to be suspended or discontinued. In either event the Master shall have the right to order the other vessel away from the Vessel or to remove the Vessel.
- (e) If the Owners are required to extend their existing insurance policies to cover ship to ship operations or incur any other additional cost/expense, the Charterers shall reimburse the Owners for any additional premium or cost/expense incurred.
- (f) The Charterers shall indemnify the Owners against any and all consequences arising out of the ship to ship operations including but not limited to damage to the Vessel and other costs and expenses incurred as a result of such damage, including any loss of hire; damage to or claims arising from other alongside vessels, equipment, floating cranes or barges; loss of or damage to cargo; and pollution.

In voyage charters, BIMCO have produced the following clause. (It should be noted that this clause was only introduced in January 2015, so Members may not have seen it before).

The clause is specifically for STS cargo transfers in the dry-bulk trades. The clause was developed because STS transfers are normally incorporated as a standard provision in tanker voyage charterparties, whilst most dry-bulk voyage charterparties do not contain such provision.

The new clause is a rider provision for use in response to charterer's request to undertake STS operations that were not otherwise contemplated in the underlying charterparty. The use of the clause results in a "safe berth" provision in a charterparty being broadened to give charterers additional rights to undertake cargo operations at anchorage. The clause covers the changed nature of cargo operations; sets out charterers' obligations for ensuring a safe location and provision of all equipment needed for conducting such operations; modifies laytime counting so that owners' interests are not compromised by the enhanced risks of delay; and requires charterers to indemnify owners for any liabilities connected with STS operations.

BIMCO Ship-to-Ship Transfer Clause for Dry Bulk Voyage Charter Parties

- (a) The Charterers shall have the right to order the Vessel to conduct ship to ship cargo operations to or from any other vessel(s), including floating cranes and barges, hereinafter "Ship to Ship Operations". All such Ship-to-Ship Operations shall be at the Charterers' risk, cost and expense.

Ship to Ship Transfer (cont.)

- (b) The Charterers shall direct the Vessel to a safe place, anchorage or berth for the conduct of such Ship-to-Ship Operations where the Vessel can safely proceed to, lie and depart from, but always subject to the Master's approval. The Charterers shall provide adequate fendering, securing and mooring equipment, and/or other equipment, as necessary for these operations, to the satisfaction of the Master.
- (c) The Charterers shall obtain any and all relevant permissions from proper authorities to perform Ship-to-Ship Operations.
- (d) If Ship-to-Ship Operations are carried out at a place or anchorage, such place or anchorage shall be considered as a berth. Notice of readiness may be tendered at such place or anchorage and laytime shall count in accordance with the Charter Party.
- (e) If, at any time, the Master considers that Ship-to-Ship Operations are, or may become, unsafe, he may order them to be suspended or discontinued. In such event the Master shall have the right to order the other vessel(s) away from the Vessel or to remove the Vessel.
- (f) Any stoppages or additional time attributable to Ship-to-Ship Operations shall not be excluded from laytime or time on demurrage.
- (g) The Charterers shall indemnify the Owners for any liabilities, losses or costs, arising out of or related to Ship-to-Ship Operations.

Indemnities

The BIMCO clauses quoted above place the responsibility for organising all aspects of STS operations upon the charterer. It is therefore the charterer (or in some cases the cargo owner) who will enter into a contractual agreement with a STS service provider to actually perform the STS operations; including the provision of mooring master(s), tugs, fenders etc. Some STS service providers, including some of the largest and best known service providers, have presented masters of ships engaging on STS operations with letters of indemnity (LoI), which the service providers ask masters to sign. The LoI often begins with the following, or similar, wording:

I hereby request the services of an STS Superintendent to be provided by XXX in accordance with the terms and conditions set out in the STS Transfer Services Agreement with XXX for the STS Transfer in question, which I hereby accept on behalf of my Owners and/or Demise Charterers

The wording of the LoI which follows the above opening paragraph is such that the owner absolves the STS service provider of any liability for loss, damage, or delay of any nature whatsoever, except where caused by gross negligence. However, the contractual relationship to provide STS services is between the charterer and STS service provider and there is no contract between the ship owner and the STS service provider. The LoI has the effect of creating an agreement between the

service provider and the owner where none previously existed. Additionally, if the owner undertakes unlimited liability for the actions of the service provider then the owner's P&I cover may be prejudiced. We therefore recommend that Members advise their masters not to sign such LoIs. They should instead:

- Advise the service provider to refer any matters of indemnity to their contractual partner, i.e. the party who has appointed them.
- Alternatively, forward the request to the charterer, asking for instructions and authority to sign on charterer's behalf.
- If the master is placed under severe time constraints or commercial pressure he should be advised to sign the indemnity 'for receipt only' and inform the charterer that he has done so without delay. The master should advise charterers that he has acted pursuant to charterer's instructions regarding the STS operation.

Indemnities have been sometimes included in the STS checklists exchanged between vessels. Such indemnities should never be agreed and, if necessary, the indemnity wording should be struck through with black ink before the checklist is signed.

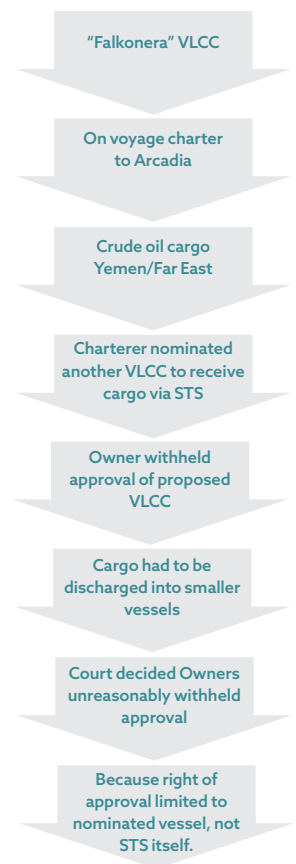
Members are furthermore advised that they should not attempt to negotiate the terms of an indemnity with the requestor; to do so might imply that the requestor is entitled to it.

Methodology

A common rider clause in charterparties incorporating STS is

Charterers shall provide, at their expense, all necessary equipment and facilities including fenders, hoses, mooring masters, etc., for safe operations to Owners/Masters' satisfaction which shall not be unreasonably withheld.

There was a recent English legal case: "The Falkonera [2012] High Court; [2014] Court of Appeal". The 'not unreasonably withheld' provision described above was included in the governing charterparty. The circumstances surrounding the case were:



Ship to Ship Transfer (cont.)

The reason that Owners withheld approval from another VLCC to perform the STS operation was that they had suffered a previous bad experience where one of their VLCCs had sustained damage when performing STS transfer with another, similarly sized, VLCC. The High Court, whose decision was backed up by the Court of Appeal, decided that the owner did not have the right under the terms of the charterparty to refuse approval for the nominated receiving VLCC, where that refusal was based purely on the grounds of previous bad experience with similar sized ships; citing that there had been numerous STS transfers from one VLCC to another that had been successfully completed without incident. The Court decided that the standard tanker charterparty wording offered a very wide discretion in permitted STS operations, so that ship operators had to be ready for all such operations and had very limited grounds to object.

We shall discuss STS transfers involving similarly sized ships later; but at this stage we encourage Members to:

- Be aware of agreed charterparty terms
- Know what can & cannot be done
- Discuss STS with Charterer
- Agree on methodology & scope of STS

Minimising Risk

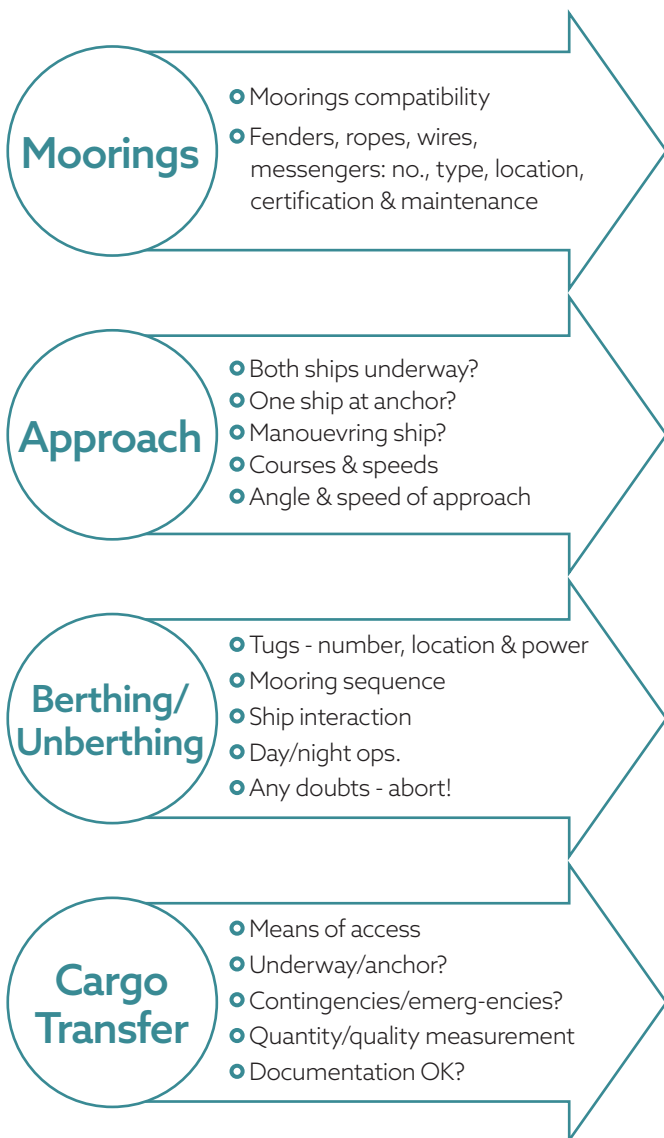
Although STS is an increasingly common method of cargo transfer and the vast majority of operations are concluded without problem; it must always be borne in mind that there are inherent risks that must be assessed and controlled before the operation commences. The safely bringing together of two (sometimes) large ships, keeping them together for a significant period and then safely separating them are tasks which most seafarers do not encounter on a regular basis. The potential for things going wrong is significant. If things do go wrong during STS transfer then the consequences can be hugely damaging. It is therefore important that everyone who is involved in the STS operation is fully aware of the inherent risks and how to minimise those risks. A very brief summary of the risks and suggested control measures are given here. A more comprehensive review of the entire STS process can be found in the Ship to Ship Transfer Guide. Members engaging in STS operations are strongly recommended to purchase copies. The Ship to Ship Transfer Guide can be purchased from:

www.witherbyseamanship.com/ship-to-ship-transfer-guide-for-petroleum-chemicals-and-liquefied-gases.html

A general overview of the risks that need to be considered is shown below. The list is not exhaustive and each operation needs to be assessed on a case-by-case basis by all of the parties involved. The entire operation needs to be understood and agreed by all parties in advance, if success is to be ensured.



Ship to Ship Transfer (cont.)



Moorings

- Moorings compatibility
- Fenders, ropes, wires, messengers: no., type, location, certification & maintenance

Approach

- Both ships underway?
- One ship at anchor?
- Manoeuvring ship?
- Courses & speeds
- Angle & speed of approach

Berthing/Unberthing

- Tugs - number, location & power
- Mooring sequence
- Ship interaction
- Day/night ops.
- Any doubts - abort!

Cargo Transfer

- Means of access
- Underway/anchor?
- Contingencies/emergencies?
- Quantity/quality measurement
- Documentation OK?

- Reducing environmental limits for berthing (wind/sea state/swell)
- Use tugs
- Use STS berthing simulation tools in pre-planning.
- Further information on reverse lightering can be found at: www.ocimf.org/media/8922/935be10f-7be0-4c00-b479-4c4e4b77ce89.pdf

Personnel transfer between vessels

- Only when absolutely necessary
- Weather & movement of vessels permitting
- If lifting equipment is only option - only cranes certified for personnel transfer should be used.
- Only after all hazards identified and operation-specific risk assessments in place.
- Also see 'Signals 98' page 4: www.nepia.com/insights/signals-online/ships/basket-case/basket-case/
- Environmental Risks
- Minimise cargo spillage during transfer
- If bunkering, perform full risk assessment and ensure all parties notified, relevant permissions obtained, effective communications in place, contingencies agreed.
- Prior to STS, transfer bunkers to inboard tanks from those which are on ship's side, where possible (to minimise pollution risk in event of hull damage).

Contingency Plans

All possible emergencies should be considered and contingency plans drawn up in advance of the STS operation.

The contingency plans should have:

- 1 Relevance: to location and access to resources
- 2 Commonality of approach: unified procedures for all stakeholders
- 3 Comprehensive procedures for different emergency scenarios

These points are summarised in the diagrams below:

Location of operation	Availability of local resources
Relevant	
Location & availability of back-up support	Integrated with local authority plans

Additional Risks

Some operations may incur additional risks which require additional mitigating measures. These include:

STS where vessels have similar length

- LOA differential less than 10%.
- Identify optimum mooring arrangement & consider additional lines in fore and aft direction.
- Optimum securing arrangements for fenders.
- Bridge wings offset to avoid damage
- Larger diameter fenders
- Reduction of limiting environmental parameters (wind, waves etc).

Reverse Lightering

- Where the loaded ship does the manoeuvring
- Use larger fenders with higher energy absorption

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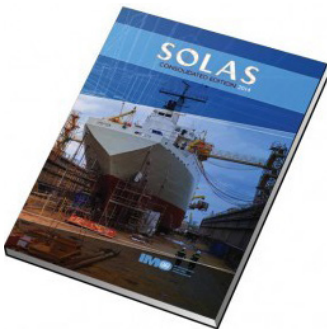
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Ship to Ship Transfer (cont.)

Raising alarm & notifying all parties	Stopping operations
Unified	
Emergency stations	Engine readiness Unmooring
Collision during mooring or unmooring	Cargo problems
Comprehensive	
Fire/explosion Incident on own or other ship	Mooring lines fail

Cargo Consideration

The International Convention for the Safety of Life at Sea (SOLAS), chapter VI, regulation 2, requires shippers to provide masters with relevant cargo information in writing, sufficiently in advance of loading, to enable masters to load cargo safely without endangering the lives of crew on the voyage.



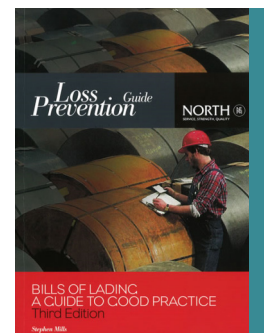
In the case of solid bulk cargoes, SOLAS states that the cargo information provided should be as required by Section 4 of the International Maritime Solid Bulk Cargoes (IMSBC) Code 'Assessment of acceptability of consignments for safe shipment.



Where STS transfer is involved, the SOLAS and IMSBC requirements listed above still need to be met. The discharging ship in the STS operation should have obtained the shipper's cargo declaration at the load-port in the normal manner. In the STS transfer, so far as the SOLAS / IMSBC requirements are concerned and in the absence of other guidance from the ship operators, the master of the discharging ship should be considered as being the 'shipper'. The master of the discharging ship should therefore provide the master of the loading ship with relevant cargo information in writing, sufficiently in advance of loading, to enable the cargo to be loaded and carried safely. Issues regarding bills of lading also need to be understood and resolved, preferably prior to the STS transfer taking place. All of the common problems associated with bills of lading may be met in STS transfer operations, including:

- Disputes regarding condition or quantity
- Delivery without production of original bills of lading
- Incorporation of terms
- Splitting, backdating or amending bills of lading

For further guidance, Members are referred to North's Loss Prevention Guide, 'Bills of Lading, A Guide to Good Practice', Third Edition by Stephen Mills.



Summary

- Members who are likely to be engaged in STS transfers on dry cargo ships are strongly encouraged to purchase copies of the 'Ship to Ship Transfer Guide' which, even though it is designed for tankers, has much information and advice that is relevant for dry cargo STS transfer.
- Model STS plans, available to download from classification societies and other websites, should be adapted and used by Members.
- Suitable clauses, such as BIMCO STS clauses, should be inserted into relevant charterparties which cover STS operations.
- Members need to be aware of, and resist, signing all-encompassing indemnities presented by STS service providers.
- Comprehensive discussions and risk assessments need to be carried out and agreed by all stakeholders well in advance of STS operations taking place.
- Sufficient staff experienced and trained in STS operations, need to be onboard throughout.

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Ship to Ship Transfer (cont.)

- Reliable and recognised STS service providers should be employed; with capable experienced mooring masters and associated staff; employing a sufficient amount of fully maintained and certified equipment for the operation.
- Contingency plans covering 'what if?' scenarios should be in place.
- Cargo risks and documentation should be covered and in order.

Disclaimer

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