Anatomy of an Accident
The Swedish Club is a pioneer in providing comprehensive ‘All-in-One’ insurance solutions and in loss prevention. Our most important mission, in a world of increasing complexity in global trade, is to assist our members and clients in managing current and future risks.

We are a leading marine insurer providing cover to some of the largest ship owning companies in the world. Through the Club’s comprehensive approach and diversified offering we have developed the highest levels of competence in risk management, claims handling, underwriting, technical services and loss prevention.

Our expertise is reflected not only in the way The Swedish Club handles and resolves existing claims, but also in how the Club monitors industry developments in order to prevent future claims and provide insurance solutions for new risks.

www.swedishclub.com
Anatomy of an Accident

The Grounding of the MS Uswidia

A key element of The Swedish Club’s Emergency Response Training programme is the creation of a realistic incident scenario, run in situ and involving not only our members, but professionals working in important maritime services and support sectors.

Anatomy of an Accident is the result of one such scenario.
This report demonstrates how easily an incident can escalate, the various parties and processes involved in dealing with an emergency situation, and the complicated interplay between the various bodies involved in bringing an incident to a resolution.

How would your operation deal with the grounding of the MS Uswidia?
We would like to thank DNV GL, HRS Sør-Norge, Navigate Response, The Norwegian Coastal Administration, The Norwegian Maritime Authority and T&T Salvage for taking part in the simulation, and giving both their time and expertise to support The Swedish Club’s commitment to loss prevention.

Emergency Response Training

The Swedish Club’s Emergency Response Training tests how your operations are affected when dealing with an incident, who is responsible for which action during an emergency, and shows just how the Club can help you as you act on the emergency plan and the ISM requirements.

The training ensures that your emergency response plan works, and that its individual elements interact and support one another should a real life crisis occur.

We offer Emergency Response Training to our Club members free of charge.
The Scenario

It is night on Saturday 29th October and the MS Uswidia is travelling at 12 knots en route from Sandnessjøen, Norway to Uddevalla, Sweden.

The vessel is a chemical tanker, 3,726 GT, 100m long, 6.8m draft and equipped with a 5,663 HP MAN B&W 7S35MC engine. It is loaded with caustic soda.

There are northerly winds, about Beaufort force 5, and more wind is forecast.

- Northerly winds Beaufort force 5.
- The vessel reports problems with the turbo charger - loud noises are heard.
- Still able to navigate at low RPMs without any problem. Only slow speed possible, about 4 knots.
- Position: N64° 14.0, E08° 04.6 - slightly north of Kristiansund, about 23 M off the coast.

Time: 03:00

The First Sign of Problems

- The main engine has completely broken down due to a cylinder unit problem and according to the Chief Engineer is not repairable.
- The vessel is now drifting in northerly winds of about Beaufort force 7 and rough seas.
- Position: N64° 12.1, E08° 02.9, about 43M from the shoreline with the current direction.
- Drifting at 2-2.5 knots, direction about 185 degrees.

Time: 03:15

Uswidia Drifting

- Tugs are sought to control the drifting and bring the vessel to safety.

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The tug has the vessel under towage, but due to increased wind (Beaufort force 8), the towing line breaks and the vessel runs aground immediately just outside Kristiansund.

There appear to be rocks around the vessel.

The Master reports that there is oil visible on the surface around the vessel, internal inspection/soundings of the tanks are being carried out on board.

In addition the Chief Engineer has broken his leg and needs to be evacuated.

The winds are expected to decrease in the next couple of hours, and the forecast is Beaufort force 2 for tomorrow.

It is found that the following spaces have been breached:
- Engine room flooded which caused the vessel to blackout
- Lube oil system tank punctured

The vessel has been salvaged and is safely towed in to Kristiansund.
The First Sign of Problems
Initial Notification from the Vessel

- Northerly winds Beaufort force 5.
- The vessel reports problems with the turbo charger - loud noises are heard.
- Still able to navigate at low RPMs without any problem.
- Only slow speed possible, about 4 knots.
- Position: N64° 14.0, E08° 04.6 - slightly north of Kristiansund, about 23 NM off the coast.
The Master of the Uswidia must now follow company procedures. This may involve contacting the superintendent, or, as an emergency situation may be developing, calling the emergency number.

The Company

The Master is advised to seek shelter and a suitable spot for anchoring.

Navigate Response

Crew members may call or send messages to family members or friends and inform them about the vessel having problems. This can then be posted on social media, which might be picked up by journalists at the time, or later.

NCA

The NCA has noticed the vessel has slowed down to 4 knots. As the weather is expected to deteriorate it contacts the ship to enquire if there is a technical problem. It establishes this is the case and so advises the NMA that the vessel might need assistance.
Uswidia Drifting
Second Notification
Advice from the Vessel

Time: 03:15

- The main engine has completely broken down due to a cylinder unit problem and according to the Chief Engineer is not repairable.
- The vessel is now drifting in northerly winds of about Beaufort force 7 and rough seas.
- Position: N64° 12.1, E08° 02.9, about 43M from the shoreline with the current direction.
- Drifting at 2-2.5 knots, direction about 185 degrees.

NCA

- Informs the JRCC, Sola, of the vessel’s situation.
- Establishes if any tugs* are available to assist the vessel should the situation deteriorate, informing the closest emergency tug that it may be needed.

T&T Salvage

The salvage company has been monitoring the area and is aware of the drifting vessel. There are nine anchor handlers in the area but it does not know if these vessels have towing capability, trained crew and proper supplies on board for this task.

T&T Salvage, amongst other salvors, contacts The Swedish Club H&M to offer assistance.
The Company and the JRCC are advised that the Uswidia is now ‘Not Under Command’ (NUC) and that the NUC lights have been turned on and the AIS updated. With these conditions the vessel will run aground in about 18-20 hours.

The Master

Following vessel monitoring via the AIS, the JRCC contacts the vessel, to establish from the Master:
• How many people on board.
• The weather conditions at the vessel location.
• The Master’s intended course of action and if he needs any assistance.

The JRCC contacts the coastguard, informing them of the situation and warning them that they may be needed at the scene within 5-6 hours if necessary. It also evaluates if there are any immediate risks in the area, such as offshore platforms close by.

On a case-by-case basis the JRCC may contact salvors and inform them there is a vessel drifting that might need assistance. Some coastguard vessels can carry out emergency towing but they will never compete with commercial salvors if they have been contracted and are able to do the job.

Navigate Response

Assists the company in preparing a short concise statement. No statement should be posted on the website but it can be emailed to journalists and other concerned parties if requested.

Navigate Response also advises that social media should be carefully monitored as it is possible that activists will pick up on the vessel’s condition and start posting worst-case scenarios on social media to draw attention to their larger causes.

Navigate Response works to establish whether any of the other parties involved (e.g. JRCC) are planning to post information through their own social media channels.

The Swedish Club

The Club’s H&M specialists begin to secure the most suitable tug commercial contract, establishing the crew’s capabilities and ability to fix temporary repairs, and exploring the various options. It contacts salvage brokers to find out the rates for tugs in the area.

The Club then contacts the Company with recommendations regarding the options, and appraises its own technical department of the situation. If these are within territorial waters, the tug option must be approved by the NMA.

The Club may contact the JRCC and authorities to establish a first contact and open up a dialogue about cooperating.

On a case-by-case basis the JRCC may contact salvors and inform them there is a vessel drifting that might need assistance. Some coastguard vessels can carry out emergency towing but they will never compete with commercial salvors if they have been contracted and are able to do the job.

*The Pollution Act: this is enforceable within territorial waters, which in this scenario are 12NM from land, and would allow the NCA to overrule any tug options chosen by the owner. The NCA can select a tug which will connect with the vessel and charge the cost to the owner’s account. This may be covered by the H&M insurance.

The Company

• Mobilises its own emergency team in Bergen.
• Informs the charterer of the situation and warns that cargo may need to be transferred to another vessel.
• Advises the NCA that the vessel is NUC.
• Prepares loading condition and data forms prior to contacting DNV GL the following morning.
• Advises The Swedish Club H&M of the incident and discusses tug options.
• Contacts Navigate Response to appraise them of the situation.

The Swedish Club

The Club’s H&M specialists begin to secure the most suitable tug commercial contract, establishing the crew’s capabilities and ability to fix temporary repairs, and exploring the various options. It contacts salvage brokers to find out the rates for tugs in the area.

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Navigate Response works to establish whether any of the other parties involved (e.g. JRCC) are planning to post information through their own social media channels.
Time: 03:30

The Operation Begins

• Tugs are sought to control the drifting and bring the vessel to safety.
The tug name, call sign and tug details are requested from the Company.

The Swedish Club

The various options suggested by The Swedish Club are discussed with its own emergency response team. A decision is made from the tug options available.

The Company

Tug options are provided to The Swedish Club H&M, offering advice on hidden costs, clearance and certification issues.

T&T Salvage

JRCC

The tug name, call sign and tug details are requested from the Company.

Navigate Response

As concrete action has been taken and can be shared, it advises the Company to post a statement on its website and to prepare for questions and approaches from the media.

The Swedish Club

Different options are received from the salvage broker, and the Club discusses them with the Company, requesting at the same time a copy of the vessels’ emergency towing booklet (ETB). It then discusses the suggested tug option with the NCA, to ensure there are no issues.

DNV GL

Following contact with the Company, DNV GL mobilises its Emergency Response Service (ERS™) Team. Upon arrival, the team retrieves necessary drawings and prepares initial calculations.

The following information was provided to DNV GL to enable their assessment:

• Vessel name
• DNV GL ID number or IMO number
• Vessels GPS position or location and heading
• Vessel’s initial loading condition
• Initial damage report and assessment
• Primary and secondary means of communication

DNV GL contacts the vessel to confirm mobilisation; to agree on email and phone numbers to be used, and to agree frequency of status update calls e.g. every 30 or 60 minutes.

Within 45 minutes of mobilisation, DNV GL supplies first damage/grounding case assessment, offering advice on how to avoid heavy rolling; and how to prepare for a possible grounding, limit its consequences and ease the potential refloating. (See attachment (i))
Towage, Evacuation & Grounding

- The tug has the vessel under towage, but due to increased wind (Beaufort force 8), the towing line breaks and the vessel runs aground immediately just outside Kristiansund.
- There appear to be rocks around the vessel.
- The Master reports that there is oil visible on the surface around the vessel, internal inspection/soundings of the tanks are being carried out on board.
- In addition the Chief Engineer has broken his leg and needs to be evacuated.
- The winds are expected to decrease in the next couple of hours, and the forecast is Beaufort force 2 for tomorrow.

Search and Rescue

Search and rescue (SAR) is the first priority and it is essential that all different parties understand that during the SAR operation the JRCC needs to be in direct contact with the Master and that other parties should not be directly involved with him at this moment. Time is of the essence and there have been cases when it has taken too long for the JRCC to get hold of the Master, this has caused loss of lives.

It is important to understand that all SAR is free of charge.
The JRCC and the Company are informed that the towing line has broken, the Uswidia is aground and that the Chief Engineer has broken his leg.

Personnel are sent from head office to investigate the hull breach, and the crew manning agency in the Philippines is informed so family can be contacted.

The Company also updates The Swedish Club H&M and DNV GL of the situation and advises them that the swell in the area is a concern as it might further damage the vessel.

A decision must now be taken on how best to keep the caustic soda cargo heated to prevent it becoming solid.

The JRCC and the Company are informed that the towing line has broken, the Uswidia is aground and that the Chief Engineer has broken his leg.

The Master

The NCA is involved in the rescue operation and requests assistance from vessels in the vicinity, other tugs and the coastguard.

Its team at Kristiansund airport begin to prepare for the clean-up operation in conjunction with the Pollution Prevention team in Horten.

The Norwegian Accident and Investigation Board are informed of the grounding. An inspector will be sent to Kristiansund to assist and act as an advisor for cleaning up the pollution.

The Norwegian Maritime Authority

At this stage the salvor highlights the difficulties of decision making in such volatile conditions - one of the tug options rejected earlier would in fact have been preferable as the contract contained a 'no cure - no pay' clause. The towing operation failed due to the broken rope and so the operation would not have cost.

T&T Salvage

The current situation must now be evaluated to establish what kind of assistance is needed. The Uswidia has drifted aground in a spot which is difficult to reach. As the Chief Engineer has broken his leg, it is essential that he is evacuated from the vessel, in addition to all non-critical crew.

It advises the Master that a Sea King helicopter is 60NM away at 30 Örlandet, with an ETA of 50 minutes and is available for the evacuation. The Master must decide when he will need the helicopter and who should be evacuated. It may not be available again for some time, as other emergencies could take priority. It can hoist up to 12 people - there are 16 crew on board the vessel.

An evacuation centre is established at Kristiansund airport, and the JRCC advises the police about the grounding, liaising with them and the Company to receive the crew, working together to ensure they are taken care of and that any injuries are attended to.

The JRCC states it is obliged to inform the public about the emergency but it is happy to use a statement from the Company at this time.
H&M specialists investigate the possibility of connecting the tug once again. This is not possible, the towage was a failure and the operation is now considered to be a salvage operation.

It contacts other salvors to discuss options and costs.

At this stage the Club begins to evaluate the damages and possible costs. If GA (General Average) is to be declared this should also be discussed with the Company in addition to agreeing which GA adjuster will be appointed. (See attachment (ii) for explanation of GA).

The Swedish Club P&I specialists now join with the Club’s H&M personnel to create one response unit, as there are personal injuries, pollution and possible wreck removal. Following a conversation between the Club and the Company, the Club must now decide whether to send a representative to the evacuation centre to assist support the crew and, if necessary, relatives.

It has been established that in Norway, taking care of the crew is the responsibility of the police, and as the crew is from the Philippines no relatives are expected to travel to either Kristiansund or Sola. The Swedish Club will obtain assistance from a law firm in Bergen to assist and protect the crew from external parties.

The Club will also contact The International Tanker Owners Pollution Federation (ITOPF) in London for advice regarding the cleaning up operation.

The media have begun to contact the Company with questions and concerns. The story is trending on Twitter and family members have begun to contact the company to express concern. Journalists have also attempted to contact the crew’s families.

It is no longer possible to keep the story contained, and the Company must be transparent and open to the press and stakeholders.

The following advice is given to the company:

- Alert the crewing managers and ensure they maintain close contact with family members.
- Update the company website regularly with ongoing statements and basic Q&As, for example:
  - What is the Company’s drug and alcohol policy?
  - Safety and incident track record (it is very good, so this will put this incident in context).
- Monitor social media. The Company has not yet established a social media presence and now is not the time to start. (If on social media then a crisis management engagement plan should be in place and implemented.)
- Appoint a spokesperson with good technical knowledge and an engaging personality. Do not necessarily choose the Managing Director at this stage, as in a later stage of the emergency it may be necessary to be seen to choose a more senior person as the spokesperson.
- Agree a plan for 24/7 cover to respond to media enquiries from all time zones – if the story shifts suddenly and the spokesperson is not available the situation could then be almost impossible to recover.
- Put forward the Designated Person Ashore (DPA) to carry out some targeted and specific interviews with key press contacts. Press conferences are not encouraged as in this environment all journalists are essentially competing to ask the toughest question.*

*Note: Should the authorities have decided a press conference was necessary all participants must be properly briefed and have clear talking points. All parties involved in the emergency must coordinate beforehand to ensure the different organisations do not overrule each other.
Fatigue Alert!

The people involved have been dealing with the emergency since 03:00 in the morning. Steps must be taken to prevent poor decision making.

Teams are split up into smaller units, to spread the workload and allow downtime.

The Club has several claims handlers working on the case and liaising with its technical department.

Operates 24/7 so its organisation is prepared.

Operates 24/7 so its organisation is prepared.

Operates 24/7 so its organisation is prepared.

In this instance, the Company chose not to activate ERS™ until the following morning.
It is found that the following spaces have been breached:

- Engine room flooded which caused the vessel to blackout.
- Lube oil system tank punctured.

DNV GL now provides a report to the Company presenting its calculations and concerns, and giving further advice to the Company (see attachment (iii)). It concludes that the Uswidia is safe with respect to stability and strength while aground.

The position of the vessel means that there are risks that the bow can be damaged. It is recommended that if possible a tug should be connected to ensure the vessel does not move and damage the bow.

The vessel is hard aground and a salvage operation is necessary to recover the vessel. However the seabed consists of rocks and so it may be dangerous for the hull's integrity if the vessel is simply pulled off.

It is concluded that refloating can be carried out during high tide by shifting/lightering cargo in combination with removing fuel/diesel oil and ballasting. However, the success of the operation will depend on availability of salvage support in the area, on scene weather, availability of onboard equipment, etc.

The report also notes that the weather will improve the next day.

The Company shares this information with The Swedish Club H&M. The possibility of dropping an anchor to keep the vessel in position is discussed. However because there is no power on the vessel the anchor chain cannot be tightened up and can only be released by free fall, which poses risks.
There is concern that due to the blackout there will only be emergency lights and emergency equipment working. No winches or pumps will function and there will be no heating for the cargo - if the caustic soda is not heated it will turn solid in two days.

All non-essential crew must now be evacuated from the vessel.

The Company

On receipt of DNV GL’s calculations the Club has, along with the Company, appointed T&T Salvage for the salvage operation. It has requested that they put a salvage master on board as quickly as possible and shared the calculations with them.

The Club will appoint a Special Casualty Representative (SCR) to monitor the salvage operation as T&T Salvage has proposed a Lloyds Open Form of Salvage Agreement (LOF) with Special Compensation P&I Clauses (SCOPIC) invoked (see attachment (iv)). The Club will suggest who to appoint but the final decision will be made by the Company.

The P&I specialists will be working in close cooperation with the H&M team during this time.

The Swedish Club

T&T Salvage believes there is an urgent need to position its team on board the vessel. The correct logistics are critical for a proper operation. T&T Salvage searches out the most suitable vessels for the operation and mobilises its team, based in Hamburg, to head for the site of the incident.

The priorities for the salvage operation are:
1. Crew
2. Environment
3. Preserve vessel and cargo

T&T Salvage

As the vessel has now suffered blackout, all crew members on board should be evacuated as there is a risk the vessel can capsize. The JRCC is in close contact with the Master and the NCA and confirms that it wishes to communicate with the Master and not the Company’s emergency response team.

When all the crew have been evacuated, the SAR is completed.

After the SAR operation the JRCC will continue to monitor the operation even if it is not directly involved. It will also work closely with the salvors in the development of salvage plans.

JRCC

Navigate Response

The strategy must now shift from a story of what happened, what went wrong, and who made mistakes to a story about what is happening next and what is being done.

At this point the Company’s spokesperson should be partially replaced by the salvage master from T&T Salvage who should be experienced with the media.

The Norwegian Maritime Authority

Must approve the salvage plan, and will then work together with all parties.

The P&I specialists will be working in close cooperation with the H&M team during this time.

The Swedish Club

Damage Evaluation
Time: 12 days after the grounding

Safe and Sound

The vessel has been salvaged and is safely towed in to Kristiansund.
The possibilities of chartering another vessel to fix the transhipment in cooperation with The Swedish Club P&I team are evaluated.

Transhipment can now be carried out as the cargo needs to be received by the cargo owner. LOF is also cancelled when the vessel is alongside and a commercial contract with The Swedish Club H&M team will be negotiated.

This is identified as an opportunity with incredibly high brand awareness for the Company, as the media is interested in how this emergency has been solved. It is important to continue communicating with the media and issue press releases about the Company’s positive achievements and the steps being taken to ensure something like this does not happen again.

The media should not remember the Company for the oil spill, but for how it dealt with the grounding and pollution. This could also be important in any legal proceedings.

The NCA will ensure the vessel has a safe berth and is also be involved in approving any transhipment plan.

The Club will now start looking at dry dock options in cooperation with the Company.

The NCA will ensure the vessel has a safe berth and is also be involved in approving any transhipment plan.

The Company

Navigate Response

The Swedish Club H&M

The Swedish Club

T&T Salvage

Navigate Response

The Company

Safe and Sound
Attachment (i)

First E-mail from DNV GL

To: Ship and Shore and whom it may concern

Subject: DNV GL ERS™ – confirmation of receipt

Dear Sirs,

Your last e-mail with loading condition and filled-in data forms has been well received. We now have all the information required to start our calculations upon which we will give advice.

In the meantime, we advise the following for your current situation:

• Close all openings which can be closed weathertight to reduce risk of downflooding.
• It is important to keep the vessel in position to avoid further grounding or damages progressing towards cargo tanks and ballast tanks. Use of tugs for this purpose is recommended and making sure at least one anchor is dropped will help the vessel from rotating significantly until the tugs are in place.
• Monitor flooding status of tanks around the grounded area for possible progressive flooding.

First objectives for ERS™:

• Assess grounding case and ground reaction force
• Assess stability and structure while aground

We will revert first by phone, then by e-mail when our first results are ready.

Best regards

for DNV GL AS

Duty Responsible

Emergency Response Services (ERS™)

DNV GL, Maritime

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Basics of General Average

Principles of General Average (GA)
The principles of GA have evolved from ancient times as a means of compensating parties with a common interest in a maritime situation. An act of general average is defined in the York-Antwerp Rules such as:

“There is a general average act when, and only when, any extraordinary sacrifice or expenditure is intentionally and reasonably made or incurred for the common safety for the purpose of preserving from peril the property involved in a common maritime adventure”.

General average will normally be declared by owners who will appoint an average adjuster to collect all the facts surrounding the incident and also the average guarantees from the interested parties. It is imperative to ensure payment of cargo contributions under the GA, so that the average guarantees (bonds) are collected before the cargo is released to the consignee.

GA expenses
- Damage caused to a vessel or cargo as a result of extinguishing a fire. For instance, cutting holes in bulk heads to access a fire, or water damage to cargo when water has been used to extinguish the fire.
- Jettison of cargo to save the vessel, either when the cargo is jettisoned to control the fire or because the cargo has shifted so as to jeopardise the stability of the vessel.
- Cost for using ship’s equipment and wages to crew during the GA incident.
- Cost of tugs used to re-float the vessel.
- Cost of running the main engine and other equipment to assist in the refloating. Also damage resulting from the use of the equipment during the GA incident can be included in the GA expenses.
- Cost of lightering and reloading cargo to re-float a vessel after grounding.
- Expenses incurred in a port of refuge.
Second E-mail from DNV GL

To: Ship and Shore and whom it may concern

Subject: DNV GL ERS™ – first response e-mail with advice

Dear Sirs

The calculations performed by DNV GL are carried out based on inputs received in your previous email with the ERS™ emergency forms and initial loading condition.

Reports attached to this e-mail:
- 01 Initial condition report.
- 02 Grounded and breached condition as reported, damaged ER, LO system TK, Bilge TK.

Conclusion:
- The vessel is safe with respect to stability and strength while aground.
- Flood water will reach 0.5-1m above the platform deck in the Engine Room.
- The damaged engine room (lack of power) and grounding at high tide causes the vessel to be hard aground and additional equipment and tug support may be necessary to refloat the vessel.
- The damages indicated are evaluated to have only minor impact on the global strength of the vessel, the limit curves for intact hull can still be used for reference.

Results:
- Ground reaction force with drafts as reported and three damaged compartments (Bilge tk, System Lub oil tk and Engine Room) is estimated to be about 600 tons at the tide at time of grounding (12:00 – 1.9m). At next high tide this tide will 30cm higher which will reduce the ground reaction by 100 tons.

Related advice
To be aware of:
- The charts’ depths show that there may be more rocks in the area not detected from
- the vessel and as the vessel is touching the bottom at low tide some double bottom ballast tanks may become damaged and flooded. Such a case may significantly reduce likelihood of fast refloating.
- Vessel should be restrained from moving and rotating around as much as possible to prevent further damages, e.g. by using tugs and anchor.
- Keep monitoring flooding status of tanks around the grounded area for possible progressive flooding during the approaching low tide.

Further objectives for ERS™
- Assess free floating condition after refloating.
- Propose first draft of refloating plan by evaluating several options for refloating.

Best regards
for DNV GL AS

Duty Responsible
Emergency Response Services (ERS™)
DNV GL, Maritime

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Attachment (iv)

Definitions of LOF, SCOPIC, and SCR

**Lloyds Form Salvage Agreement 'No Cure-No-Pay' (LOF)**

This is a standard legal document for a proposed marine salvage operation. The two-page contract is published by Lloyd's of London. It is called “open” because it is literally open, with no amount of money being stipulated for the salvage job: the sum to be paid is determined later in London by a professional arbitrator. At the top of page one, beneath the title "Salvage Agreement" is a statement of the contract's fundamental premise. "NO CURE – NO PAY".

The form originated in the late 19th century and is the most common such form of international salvage agreement.

**Special Compensation P&I Clauses (SCOPIC)**

The SCOPIC Clause is supplementary to any Lloyds Form Salvage Agreement 'No Cure-No-Pay' (LOF).

Its purpose is to provide compensation to salvors for their expenses in preventing pollution, as well as removing pollution in the immediate vicinity of the vessel, insofar as this is necessary for the proper execution of the salvage, but not otherwise. It only applies if the Article 13 Salvage Award is below the salvor's actual expenses.

This is a safety net for salvors in the "no cure – no pay" principle. SCOPIC can be invoked, in writing, by the salvor at any point during the operation.

Fixed SCOPIC tariffs are listed in appendix A to the SCOPIC and include personnel, tugs, portable equipment and downtime. An uplift of 25% is applied. Traditional Article 13 Awards will be discounted by 25% of the amount by which any Article 13 Award exceeds the SCOPIC remuneration.

It is important to remember that with LOF the salvor still has an obligation to use best endeavour to save cargo, ship and the environment.

**Special Casualty Representative (SCR)**

Appointed by the shipowners, the SCR perform his functions under the SCOPIC clause on behalf of all parties and their insurers. His role is to monitor the salvage services and liabilities and provide a Final Salvage Report which forms the basis for the settlement of any claim for SCOPIC remuneration which the salvor might have against the shipowner. SCRs are chosen by the shipowner from a Panel ("the SCR Panel") the members of which are chosen by a group consisting of representatives of the International Group of P&I Clubs, the International Salvage Union, the International Union of Marine Insurers and the International Chamber of Shipping (called the SCR Committee).
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