

International Northern Sea Route Programme (INSROP)

Central Marine Research & Design Institute, Russia



The Fridtjof Nansen Institute, Norway



Ship & Ocean Foundation, Japan



INSROP WORKING PAPER NO. 46-1996

Sub-programme IV: Political, Legal and Strategic Factors.

Project IV.3.3: Marine Insurance for the NSR -

Towards a New Risk Regime?

By: Dr. Edgar Gold, Q.C.

John A. Cantello, B.A.(Hons.), A.C.I.I., C.I.P.

Peter L. Wright, C.Arb.

Address:

Oceans Institute of Canada 1226 LeMarchant Street Halifax, N.S., B3H 3P7 CANADA

Tel: +1-902-494-3879 Fax: + 1-902-494-1334 E-mail: edgar.gold@dal.ca

Date: 12 April 1996.

Reviewed by: Jan Lunde, Esq., Managing Director

UNITAS Assuranceforening, Oslo/Arendal, Norway.

What is an INSROP Working Paper and how to handle it:

This publication forms part of a Working Paper series from the International Northern Sea Route Programme - INSROP. This Working Paper has been evaluated by a reviewer and can be circulated for comments both within and outside the INSROP team, as well as be published in parallel by the researching institution. A Working Paper will in some cases be the final documentation of a technical part of a project, and it can also sometimes be published as part of a more comprehensive INSROP Report. For any comments, please contact the authors of this Working Paper.

FOREWORD - INSROP WORKING PAPER

INSROP is a five-year multidisciplinary and multilateral research programme, the main phase of which commenced in June 1993. The three principal cooperating partners are Central Marine Research & Design Institute (CNIIMF), St. Petersburg, Russia; Ship and Ocean Foundation (SOF), Tokyo, Japan; and Fridtjof Nansen Institute (FNI), Lysaker, Norway. The INSROP Secretariat is shared between CNIIMF and FNI and is located at FNI.

INSROP is split into four main projects: 1) Natural Conditions and Ice Navigation; 2) Environmental Factors; 3) Trade and Commercial Shipping Aspects of the NSR; and 4) Political, Legal and Strategic Factors. The aim of INSROP is to build up a knowledge base adequate to provide a foundation for long-term planning and decision-making by state agencies as well as private companies etc., for purposes of promoting rational decision making concerning the use of the Northern Sea Route for transit and regional development.

INSROP is a direct result of the normalization of the international situation and the Murmansk initiatives of the former Soviet Union in 1987, when the readiness of the USSR to open the NSR for international shipping was officially declared. The Murmansk Initiatives enabled the continuation, expansion and intensification of traditional collaboration between the states in the Arctic, including safety and efficiency of shipping. Russia, being the successor state to the USSR, supports the Murmansk Initiatives. The initiatives stimulated contact and cooperation between CNIIMF and FNI in 1988 and resulted in a pilot study of the NSR in 1991. In 1992 SOF entered INSROP as a third partner on an equal basis with CNIIMF and FNI.

The complete series of publications may be obtained from the Fridtjof Nansen Institute.

SPONSORS FOR INSROP

- Nippon Foundation/Ship & Ocean Foundation, Japan
- The government of the Russian Federation
- The Norwegian Research Council
- The Norwegian Ministry of Foreign Affairs
- The Norwegian Ministry of Industry and Energy
- The Norwegian Ministry of the Environment
- State Industry and Regional Development Fund, Norway
- Norsk Hydro
- Norwegian Federation of Shipowners
- Fridtjof Nansen Institute
- Kværner a.s.

PROFESSIONAL ORGANISATIONS PERMANENTLY ATTACHED TO INSROP

- Ship & Ocean Foundation, Japan
- Central Marine Research & Design Institute, Russia
- · Fridtjof Nansen Institute, Norway
- National Institute of Polar Research, Japan
- Ship Research Institute, Japan
- Murmansk Shipping Company, Russia
- Northern Sea Route Administration, Russia
- Arctic & Antarctic Research Institute, Russia
- ARTEC, Norway

- Norwegian Polar Research Institute
- Norwegian School of Economics and Business Administration
- SINTEF NHL (Foundation for Scientific and Industrial Research
 - Norwegian Hydrotechnical Laboratory), Norway.

PROGRAMME COORDINATORS

 Yuri Ivanov, CNIIMF Kavalergardskaya Str.6
 St. Petersburg 193015, Russia Tel: 7 812 271 5633
 Fax: 7 812 274 3864
 Telex: 12 14 58 CNIMF SU • Willy Østreng, FNI P.O. Box 326 N-1324 Lysaker, Norway Tel: 47 67 53 89 12 Fax: 47 67 12 50 47 Telex: 79 965 nanse n

Fax: 47 67 12 50 47 Tel: 81 3 3502 237
Telex: 79 965 nanse n Fax: 81 3 3502 203
E-mail: sentralbord@fni.no Telex: J 23704

 Masaru Sakuma, SOF Senpaku Shinko Building
 15-16 Toranomon 1-chome Minato-ku, Tokyo 105, Japan Tel: 81 3 3502 2371
 Fax: 81 3 3502 2033

CONTENTS

1.	INTRODUCTION	1
2.	MARINE INSURANCE: GENERAL PRINCIPLES	3
3.	MARINE INSURANCE:HULL AND MACHINERY COVERAGE	5
4.	MARINE CARGO INSURANCE	3
5.	LIABILITY INSURANCE Collision Liability Damage to Fixed and Floating Objects Deviation Expenses Cargo Liability Towage and Salvage National Regulatory Requirements	10 11 11 12
6.	MARINE POLLUTION CLAIMS	13
7.	INSURANCE MARKET PROJECTIONS: SOME PRELIMINARY CONCLUSIONS	15
8.	INSROP AND MARINE INSURANCE: THE WAY AHEAD	۱9
NOTE	ON THE AUTHORS	28
DEEEL	PENCES	0

MARINE INSURANCE FOR THE NORTHERN SEA ROUTE¹

TOWARDS A NEW RISK REGIME?

Edgar Gold
John A. Cantello

Peter L. Wright

1. INTRODUCTION

1. Since 1993 the International Northern Sea Route Project (INSROP) has been examining

the feasibility of such a route from various aspects: environmental, technical, political,

commercial, scientific and legal.² The principal purpose of INSROP is to build up a knowledge

base which is adequate to provide a foundation for long-term planning by government agencies

and the private sector for the promotion of rational decision-making concerning the use of the

Northern Sea Route for maritime transit and regional development. One of INSROP's sub-

projects has been engaged in an examination of the possibility of providing the projected

INSROP shipping services with sufficient marine insurance coverage. There is general agreement

that INSROP could not proceed if the international marine insurance market could or would not

provide the required risk coverage. Accordingly, marine insurance coverage is an essential

foundation for the Northern Sea Route. The route will have no viability without users and users

cannot operate vessels without adequate insurance coverage.

1

- 2. Almost since shipping first began it has operated within a well-organized and guaranteed form of financial protection against the multitude of marine risks that exist. This is especially true when shipping has to operate under conditions, where particular hazards and difficulties are expected to be encountered, and where the long-term actuarial records, on which the insurance industry relies, are unreliable, nonexistent or unavailable. In other words, if the Northern Sea Route is to be developed, if it is to attract international investment, if it is to convey goods to markets, and if it is to be profitable, it will require adequate, marketable marine insurance coverage.
- 3. This Working Paper will provide a further assessment of the marine insurance requirements for the Northern Sea Route. The principal marine insurance areas, covering hull and machinery risks, cargo risks, and protection and indemnity (third party) risks will be outlined and, where appropriate, examined in terms of the Northern Sea Route. In addition, an initial assessment of the capacities of the major marine insurance markets, to accept this type of risk, will be made. This will reflect the "field research" carried out under this sub-project since 1994 in the major marine insurance markets of London, New York, Tokyo and Norway, as well as research in various Russian centres. In addition, the sub-project has also benefitted from INSROP research in other sub-programmes, as well as the large research base tabled at the INSROP Tokyo Symposium in October 1995. Although navigation in ice has received limited insurance coverage for many years, the large volume of navigation contemplated under the Northern Sea Route system, presents the international insurance market with substantially new and generally unknown risks. It should be pointed out that this is neither an exposition of marine

insurance law nor a detailed examination of technical insurance principles. This paper will simply provide an initial overview of a complex area and, provide some information on the research that has taken place and that which is still required.

2. MARINE INSURANCE: GENERAL PRINCIPLES

"Modern" marine insurance has its antecedents in 17th Century London where 4. commercial insurance risks were first underwritten on a regular basis. However, its earlier history dates back at least two thousand years. Marine insurance is a contract to assume risk and is based on a relatively simple principle: "whereby one person, called the 'insurer', undertakes. in return for the agreed consideration, called the 'premium', to pay another person, called the 'assured', a sum of money, on the happening of a specific event".4 This is laid down in legislation in various countries and basically means that in a contract of marine insurance the insurer, upon receipt of a premium payment, undertakes to indemnify the assured against losses caused by a marine peril.⁵ As the marine insurance agreement is contractual it is absolutely essential that the parties understand what is involved. The insurer is entitled to full disclosure of all material facts upon which the risk will be underwritten. The principal requirements for the assured are, therefore: to pay the premium and disclose all material facts to the insurer, to respect all requirements set out in the insurance policy, to act prudently when an accident occurs, and to assist the insurer in the investigation of any claim. On the other hand, the insurer is obliged to provide prompt payment under the policy once an insured peril occurs. This

relationship may be complicated, as marine insurance is normally not effected directly between the two parties, but through a broker who arranges the contract, but as an agent of the assured who is compensated by the insurer.

5. In general, the long history of marine insurance has also produced fairly widely-accepted legal practice and interpretations of codified principles, based on good actuarial/risk records, to assure a reasonable predictability of decisions. Problems only arise when new risk areas are being developed and/or in cases where the information base of material facts needed by the insurer is less developed. This will inevitably be a problem in Northern Sea Route navigation, which will persist until insurers have a better idea of what the risk will be. Accordingly, the provision of early, accurate information, on all aspects involving the Route, will assist in the prevention of costly claims which may not be covered. One of the basic problems may be in the area of full disclosure, already referred to above. Marine insurance law refers to the need of "utmost good faith" being observed. If such utmost good faith is not observed by either party the policy may be avoided by the affected party. This requirement is very strictly interpreted. It means that even innocent ignorance, or an innocent misrepresentation by the assured, could result in the policy being avoided. In other words, the full disclosure of all factors relating to Northern Sea Route navigation will be critical, especially in the early stages. This has very clear dual advantages. The assured wishes to receive reasonable risk coverage at a competitive premium. The insurer needs to know what the risk exposure potential is, so that an appropriate premium can be calculated. It is, of course, likely that the insurance risk will be widely spread and also re-insured. Accordingly, the insurer is also obliged to provide full disclosure to the reinsurer. As the Northern Sea Route navigation system is still relatively unknown, the expansion of all aspects of the knowledge base is essential and, probably, the most important by-product of INSROP.

3. MARINE INSURANCE: HULL AND MACHINERY COVERAGE

6. This coverage provides the shipowner with compensation against total and partial losses of and to the hull, machinery and equipment of the vessel. The policy sets out, in some detail, that these losses must be caused by a stated peril of the sea.⁶ The policy will normally state a specific maximum "value" which may or may not be related to the actual value of the vessel. However, it is this stated value on which the premium will be based and which will be paid when a total loss occurs. If the stated value is above "actual" value the vessel is considered to be "overinsured" and the reverse is true if the vessel is "under-insured". In the latter case, this will affect claims for partial losses. It can be predicted that hull and machinery underwriters will be concerned about all claims on the Northern Sea Route, but especially those related to ice damage to hull, rudder, propellers etc. In this connection it should be noted that certain coverage may, in fact, exceed the sum insured. An example would be salvage expenses which, in Arctic waters could be quite significant. Depending on the varying standard and special clauses that will be included in the hull and machinery policy, there may be other variations.

- 7. The hull and machinery policy will contain a number of standard and many special "clauses" which are beyond the scope of this paper. As already indicated, basic cover will consist of "total loss" cover applicable when the vessel is physically lost in its entirety, through sinking, collision, disappearance, fire, or explosion, etc. When a total loss occurs the insured "value" is paid to the assured and the proceeds need not necessarily be used to purchase a new vessel. "Partial loss" cover applies when the vessel is damaged or partially destroyed and is in need of repair. The decision of whether to pay for the repairs will be made on the basis of repair costs as related to the insured value. In general, the insurer is not obliged to pay claims until the repairs have been carried out. It should also be noted that there are some quite specific variations in the insurance coverages offered in different markets.⁷
- 8. Another important hull and machinery marine insurance principle relates to "constructive total loss" which, without question, could become quite critical in the Northern Sea Route context. A constructive total loss (CTL) occurs: when the insured is deprived of the insured matter (vessel or cargo) and is not likely to recover it; when an actual total loss is inevitable; when a ship is so badly damaged that the estimated cost of recovery/repair would exceed the recovered/repaired value; or, in the case of cargo, the estimated costs of recovery, reconditioning and forwarding to destination would exceed the arrived value. The actual decision of whether a vessel is a CTL depends on each case scenario and will also depend upon a decision by the insurer. A number of Arctic claims have already shown that CTL claims for the Northern Sea Route are likely to be significant. In ice-infested areas where salvage, towage and repair costs are likely to be very high, and where damage to ship and cargo may occur in

virtually inaccessible areas, CTLs are likely to be frequent. In some cases, the affected vessel could be ice-bound for a season or longer.

- 9. Although "collision liability" is, strictly speaking, a third-party risk, it is included in the hull and machinery policy. Under the Anglo-American system the insurer covers three fourths of the collision liability towards another vessel. The Norwegian-Japanese system generally covers such liability fully. It should be noted that collision liability is usually apportioned on the degree of fault involved by both vessels in the collision. This has implications for the Northern Sea Route where vessels are more likely to operate in close proximity with icebreaker escorts, in convoys etc. This would clearly be a factor at the time of "disclosure". In this area, the variations between insurance markets may be quite significant. For example, under Norwegian conditions a CTL may be declared once the estimated costs of recovery/repair have exceeded 80 per cent of the recovered/repaired vessel, and not 100 per cent, which is the case under London or New York coverage.
- 10. In general, there is relatively little statistical and other actuarial information on hull and machinery insurance in ice-infested waters. On the contrary, in the past, policies have always forbidden navigation in such waters, or vessels operating in ice conditions have had to obtain special coverage, or simply have not been covered. This is changing. Canadian underwriters have begun to provide coverage for Arctic risks⁸, and it is likely that other markets will follow suit, if market forces demand it, and if the information on which the risk will be based is improved. Finally, another important separate cover offered by hull and machinery insurers

related to "Loss of Hire" (LoH). This cover can be quite significant for vessels on the Northern Sea Route which are damaged in waters far removed from the nearest repair facility and may thus be out of service for long periods.

4. MARINE CARGO INSURANCE

11. As the main purpose of the Northern Sea Route will be to transport bulk cargoes (dry and liquid), general cargo, containers and other forms of cargo, it is essential that this cargo be protected by adequate risk coverage. In general, the basic principles, set out for hull and machinery insurance, are also applicable to marine cargo insurance. Cargo insurance provides risk coverage for losses sustained to the assured's cargo and goods whilst in transit on board a vessel. As the ownership in goods may change during the voyage, insurance coverage may also change. Also the general principles of sales contracts—i.e. if the goods are carried on a cost, insurance and freight (CIF) or "free on board" (FOB) basis— may dictate who takes out cargo insurance. For example, a bulk cargo of crude oil, which has been purchased by a Western refinery or oil company, may be carried on a vessel chartered by the purchaser and thus insured accordingly. On the other hand, a container vessel carrying 3,000 containers which, in turn, are loaded with 350,000 separate packages, owned by different parties, under different bills of lading, may all be insured under different cargo policies.

12. Like its hull and machinery counterpart, marine cargo policies have a number of well-accepted and specialized clauses covering different types of cargo, different trades, the various risks involved and depending on the insurance market utilized. Risk related to total and partial loss is covered and CTL claims are also available. Again, in the Northern Sea Route context, the expected CTL of cargo is quite realistic given the distances involved and the lack of transshipment and storage facilities in the passage region. Actual carriage of goods by sea law is international in scope and generally "regulated" by international conventions. These conventions, which may not be accepted by all the states represented by the cargo and shipping interests in a particular case, set out the basic divisions of liability and also provide specific limitation of liability. In general, if a vessel is lost or damaged, with commensurate cargo loss and damage, the cargo insurer will pay the assured. In turn, however, the cargo underwriter will look to the vessel's liability insurer to recover losses which are considered to be attributable under the carriage of goods agreements covering the particular transport.

5. LIABILITY INSURANCE

13. Marine liability insurance covers two basic risk areas: protection and indemnity (P&I) risks and oil pollution risks. Both are extremely important in marine transportation generally, and for the Northern Sea Route specifically. P&I insurance is provided on a mutual basis by groups of shipowners who contribute to a centrally-administered fund based on tonnage entered.¹⁰ These funds are administered by P&I "clubs" based principally in London, Norway,

U.S.A., Sweden, and Japan. The "club" manages the members' risk exposure and handles the P&I claims under a set of rules drawn up for each club. The club vets prospective shipowner members carefully in terms of risk record, type, age and condition of vessel and contemplated trade. P&I clubs operate on a not-for-profit basis and, accordingly, depend to a great extent, on the cooperation of "club members" to keep losses down. Traditionally, at least in theory, P&I clubs insure their members for stated risks with an unlimited ceiling. However, since February 1996, the P&I Clubs have decided that they will place a limit of approximately USD 20 billion on claims. This significant coverage can only be achieved through the pooling of each club's resources, through an inter-club agreement and through reinsurance. Obviously, members with a poor loss record subsequently pay more. This will have some implications for the Northern Sea Route as many vessels will be Russian owned, operated, based and flagged, often without a known loss record. Accordingly, such vessels, on being entered with a club, will be faced with initially higher premiums until a reliable loss record is established.

- 14. P&I insurance covers some thirty different claim areas. However, one of the principal features of P&I coverage is the "omnibus rule" which permits claim recovery even in cases where the claim does not fit within specifically listed P&I risks. P&I claim areas of specific significance for the Northern Sea Route are:
- 15. Collision Liability: This is coverage for "third-party" liability, for that portion not covered under the hull and machinery policy, which is especially applicable in cases where the

Anglo-American system of hull and machinery coverage is utilized. The comments already made above, in discussing collision liability, are also applicable here.

- 16. Damage to Fixed and Floating Objects: This involves claims arising out of collision with and/or damage to docks, harbour works, jetties, loading/unloading installations, navigational aids, various marine structures, and submarine cables. In the Northern Sea Route context, where vessels will often have to operate without adequate towage and pilotage assistance, this type of claim can be expected to increase.
- 17. Deviation Expenses: Deviation is generally defined as a deliberate geographical diversion of a vessel from its contractual routing for a specific purpose. However, there may also be non-geographical deviation, as in cases where cargo is carried in a different mode than contractually agreed or as is the custom of a particular trade. In the Northern Sea Route context there could be many, costly deviations due to ice and weather conditions, port congestion, lack of icebreaker escorts etc. This aspect is, obviously, closely linked to cargo insurance, as it is expected that cargo policies for transportation on the Northern Sea Route will specifically permit this route, but might also specify certain geographic requirements and limitations.
- 18. Cargo Liability: This is frequently the area of some of the most significant P&I claims. The P&I policy covers claims against the carrier for damage, loss, and non-delivery of cargo, which has been caused by the negligence of the carrier under the various national and international carriage of goods by sea rules. It is in this area where the cargo insurer, who has

paid a claim, will seek recovery from the shipowner, represented by the P&I club. There will be notable problems in this area on the Northern Sea Route, due in part to the fact that Russia and Japan have not so far accepted the later international rules.¹¹ In cases where cargo is carried under a charter party, especially for liquid bulk cargoes such as oil, cargo liability is generally placed on the shipowner. In the Northern Sea Route context this will make P&I clubs very cautious in terms of their tanker owner members who are planning to trade on the route.

- 19. Towage and Salvage: Claims in these areas can also be expected to be above average on the Northern Sea Route. Although vessels will be escorted by icebreakers and operating in convoys for a large sector of the route, it can be expected that there will be machinery breakdowns, loss of rudder/propellers and other damage, which will involve the need of towage by specialist tugs or other vessels, as well as actual salvage of vessel and cargoes. Of particular concern may be the operation in close proximity with nuclear-powered vessels. Related to this aspect is another P&I category: obstruction and wreck removal, which is also often extremely costly.
- 20. National Regulatory Requirements: This is another expensive P&I category involving fines and other legal penalties and costs. Given that the whole national regulatory framework of the Russian part of the Northern Sea Route is either undeveloped or unknown it is likely that vessels on the route will be charged with numerous minor and major transgressions related to maritime safety, environmental control, administrative, customs and criminal law breaches etc. There may also be aspects which may not be in uniformity with international maritime law, such

as direct action against insurers etc. Again, P&I insurers can be expected to be very wary in this category which has a significant claims potential.

21. In general, P&I claims will all be subject to the traditional maritime law principle of limitation of liability which permits the shipowner to limit liability for property damage and personal injury and death claims, up to a predictable limit related to a specific amount per vessel tonnage unless the damage occurred with the "actual fault or privity" of the shipowner. Obviously, if this requirement is breached, as has often occurred in recent court cases, the shipowner (and, thus the P&I insurer) will be liable for the full claim. An exception exists in cases of oil pollution, which will be discussed below.

6. MARINE POLLUTION CLAIMS

22. Marine pollution claims generally are also covered under the P&I policy. However, in cases of oil pollution, coverage is only available up to a ceiling of USD 500 million which, in special cases, may be raised to USD 700 million. However, such a ceiling only applies if two private¹² or two international oil pollution compensation schemes¹³ are either not available or not applicable. In most cases these schemes will be applicable. It is beyond the scope of this paper to say much about these complex compensation systems. They are all a type of insurance system, funded by the international shipping and oil industries and/or participating states, which compensate coastal state claimants for oil pollution damage suffered in the aftermath of a tanker

accident or spill. Compensation is available up to approximately USD 250 million, but depends on the size of the vessel involved, the amount of damage and other factors¹⁴. Only tankers laden with persistent oil are covered and the claims procedure, for more serious accidents, is generally administered by the International Oil Pollution Compensation Fund. It should be noted that only oil pollution is considered under these categories. Pollution from substances other than oil would be covered under the normal P&I claims procedure and, again, up to applicable limits of liability. This means, of course, that a tanker laden with crude or refined oil traversing the Northern Sea Route, would normally be covered under the special oil pollution schemes, whilst a tanker laden with liquid noxious and hazardous chemicals would not be.¹⁵

23. There is little doubt that for the Northern Sea Route the threat of pollution, of what is considered to be an ecologically extremely sensitive environment, presents a major impediment. In fact, it can be predicted that the pollution liability and compensation systems, as presently available, will have to be augmented in some way and special coverage will have to be made available. A precedent for this is Canada's Arctic Pilot Project which set out much higher limits for pollution compensation for Canadian Arctic navigation routes. Accordingly, it can also be predicted that, at least in the initial stages, pollution coverage on the Northern Sea Route will require significant premiums—a factor which will affect the overall economic viability of the route. This is also an area where more scientific and technical information is required. For example, it may simply not be feasible to transport pollutants on this route through heavily ice-infested waters in single-hull tankers. Technical alternatives may be required, as well as much better knowledge on ice dangers to steel hulls, pollutant cleanup technology in Arctic ice

conditions, environmental damage potential, ports of refuge etc. It is, of course, well known to all that shipping must operate today in a much more environmentally-conscious world despite the fact that ship-source pollution contributes less than ten per cent of all pollutants entering the oceans. Accordingly, it is likely that Russian Arctic cities, which are the causes of heavy industrial pollution would, nevertheless, expect zero pollution from vessels in transit.

7. INSURANCE MARKET PROJECTIONS: SOME PRELIMINARY CONCLUSIONS

24. Even this preliminary overview of the marine insurance system, which could only cover certain aspects, should illustrate that risk coverage for the Northern Sea Route will not only be essential but also quite problematic. How will the insurance market react to these demands and requirements? This question becomes more complex given the fact that there is so far relatively little experience and statistical information on this type of navigational risk. This is, of course, further complicated by the fact that many of the vessels to be utilized on the route, both carriers as well as escorts, are expected to be Russian flag ships, drawn from a fleet which, until quite recently, operated under state ownership and managed in a system vastly different from traditional, international commercial shipping. Although this factor is changing rapidly, it can be expected that operational and management attitudes may take longer to change and thus increase risk in the intervening period. However, in general, there is also reason for optimism. Marine insurers, although belonging to a predictably conservative industry, also have a well-deserved reputation for responding to commercial demands and changes in a positive, innovative

manner. One only needs to consider the risk coverage for VLCC and ULCC tankers, enormously costly offshore oil drilling equipment, super container vessels, LNG gas carriers, super cruise ships etc., which have all appeared on the maritime scene in the past two or three decades. These new systems have all involved greatly increased direct and third party risks, including oil pollution claims which are today calculated in billions of dollars. Yet marine insurers, despite early caution, have provided reasonably adequate coverage for all. Accordingly, there is no reason to believe that this will not also apply to coverage for the risks associated with the Northern Sea Route.

25. The global marine insurance market is relatively compact and concentrated in London, New York, Tokyo and Oslo. There are several smaller centres which are relatively negligible. Of these only the Canadian market, due to some experience in Arctic risks, is of real interest. Until a few years ago the London market basically dominated the area. However, although close to 65 per cent of all marine insurance is still based in the London market, there have been notable changes. In particular, other European and North American reinsurers now provide significant new market capacity. Furthermore, although many of the major P&I clubs are still based in the United Kingdom, other clubs, in Norway, Sweden, the U.S.A. and Japan, have also made inroads into London's traditional dominance. Accordingly, although the United Kingdom marine insurance market is still the most important, single marine global insurance market, it has been suggested that other markets might well be capable of accepting Northern Sea Route risks. One of the reasons for this is: if other markets, such as the Norwegian, Canadian, U.S., or Finnish markets, might be interested to take a lead on this matter, they are today more likely

to obtain sufficient financial capacity and reinsurance coverage without utilizing the enormous capacity of the London market. Nevertheless, this is an area which has so far not been tested and it is clear that convincing the London market of the viability of the Northern Sea Route must continue to be a priority.

26. The London marine insurance market is composed of two principal parts: Lloyd's underwriters and various insurance companies, all members of the Institute of London Underwriters (ILU). Lloyd's underwriters are generally individual "names", formed into syndicates which "spread the risk" as widely as possible. It should be noted that the London insurance market generally has not had a very good record in recent years due to extremely high losses in non-marine areas. To some extent, this has affected the marine market during the period 1991-1994 when capacity seemed to be reduced and insurance rates increased significantly. However, the latter part of 1995 and, so far, 1996 has shown increasing capacity with rates returning to pre-1992 levels. This will undoubtedly result in increasing market competition which should or could benefit the Northern Sea Route proposal. However, as already indicated, the market will react positively if there is at least some reasonable assurance that claims will not outrun premium income. It is here that the INSROP marine insurance subproject has been concentrating some of its research. Direct contacts were established with the ILU, with the chairmen of the Joint Hull and Warranties Committees, with the most influential "writers" in the market, with a perceived or expressed interest in the project, with the various mutual P&I clubs, with the Salvage Association, who are the market advisers on all aspects of claims and loss prevention, with the Association of Average Adjusters, who formulate any claim,

and with the principal, specialist insurance brokers and reinsurance brokers who will negotiate any insurance and reinsurance coverage.

- 27. At this stage, the general conclusion is that the London market has not taken a position on the Northern Sea Route due to an almost total lack of reliable statistics on the route, which is mainly due to a lack of traffic. Both the ILU and the Lloyd's Warranties Committee have a very large statistical base on almost all aspects of marine risks. However, they have little or nothing on Arctic navigational risks. No statistics are considered of value to marine insurers unless they include reliable claims information expressed in financial terms. Furthermore, there appears to be some concern about the reliability of even that information which is available. Although the hull and cargo insurance markets and the P&I clubs will undoubtedly offer cover for any projected Northern Sea Route operations, the cost for such cover will, to a large extent, be determined by the information base and claims statistics available. In the early stages this cost is likely to be very high and could even discourage the commercial investment necessary.
- 28. It is conceded that any projections in this area are highly questionable and simply based on the scant information that is available. Some of this information is drawn from the Canadian market. Under the Arctic Pilot Project several Canadian commercial enterprises formed a consortium some years ago in order to produce and liquify a large amount of LNG in the Canadian Arctic and then transport it to Canada's Eastern seaboard in ice-breaking and/or ice-strengthened vessels. The project was eventually shelved, although not for marine insurance reasons. Nevertheless, hull insurance alone was the largest single component of transportation

costs, amounting to almost 24 per cent.¹⁶ In this respect the Canadian market already established basic, negotiable Arctic hull rates as far back as 1985.¹⁷ However, this very basic information all indicates that initial marine insurance costs for the Northern Sea Route will be high.

29. Although there is no predictable, mathematical formula which determines marine insurance premiums, rates are also not simply set according to the underwriters' whim or feelings. Premiums will differ depending on the time of coverage, type of vessel and cargo, the actual route taken, the time of the year and a variety of other factors, which are considered relevant. For example, it has been predicted that Northern Sea Route voyages will, at least initially, be covered under voyage rather than time policies, which might lead to higher per-unit insurance costs, until underwriters become more accustomed to providing this type of risk coverage. As a result, the increased premium will reflect the additional risk exposure of the Northern Sea Route as well as the higher transaction costs associated with the shorter duration of the voyage. It has to be noted that the underwriter is not a co-investor in the operation who shares in the profits. The underwriter simply insures the risks associated with the operation. Accordingly, premium costs are only affected by market competition. If there are no or few competitors for this type of business, those who make up the market will be in a position to ensure that they run a profitable venture in terms of premium income.

8. INSROP AND MARINE INSURANCE: THE WAY AHEAD

- 30. At this stage there is ample evidence that the Northern Sea Route information base is changing rapidly. INSROP is providing the necessary leadership. Initial stages of INSROP have already shown that there will be cargoes on the Northern Sea Route and that there is a much-improved commercial, legal, social and political "climate" along the route. Significant critical environmental information, which will be required in order to assess the potential of environmental damage, is also being compiled. Much of this was confirmed by the first INSROP Symposium, held in Tokyo in October 1995, which brought the bulk of the various INSROP research groups together for the first time. The five-day meeting attracted researchers from the three principal INSROP supporting states: Japan, Norway and Russia, as well as research groups from Finland, Canada, Germany, United Kingdom, and the U.S.A. Some 60 papers were presented at sessions divided into: Natural Conditions and Ice Navigation; Environmental Factors; Trade and Commercial Shipping Aspects; and, Political and Legal Aspects. This research reflected the work carried out by INSROP during its first two years and consisted of the first systematic compilation of a knowledge base on this subject.
- 31. The symposium was also presented with the initial conclusions of the first INSROP experimental Northern Seas Route voyage, planned and carried out by the Japanese INSROP research group, with some assistance from other researchers, in the summer of 1995. This voyage took a Russian-flag, 15,000 DWT, SA-15 type, ice strengthened cargo vessel on a

commercial voyage along the Northern Seas Route from Yokohama to Northern Norway in 21 days, including the time spent on ice and other scientific experiments. Although the voyage was principally undertaken for a large number of scientific experiments, it also provided evidence that the Northern Sea Route was navigable without ice-breaker assistance in the summer season and would, thus, significantly reduce the normal Far East to Europe transit time.

32. Other papers, presented at the Tokyo Symposium concentrated heavily on scientific aspects related to ship design for ice navigation, ice-breaking criteria, and ice conditions. Initial conclusions reached show that the more severe ice conditions will continue to require ice-breaker assistance and that, even in the summer season, vessels without ice-strengthened hulls, are at a greater risk than strengthened vessels.20 The Symposium's environmental sessions provided significant evidence that the Arctic environment is more vulnerable to oil and chemical spills and that environmental factors, conceptual design and environmental impact assessment must underlie navigation in the region.²¹ Russian researchers indicated that the ecological safety of navigation, as well as traditional national security, on the Northern Sea Route was being given a very high profile by the Russian Government. This was a factor also further confirmed in another recent INSROP study which emphasized the importance of "international environmental security" (IES) which would not permit western operations in Russia to sidestep strict environmental requirements.²² This confirmed the commercial and insurance implications already referred to above. It is quite certain that some new or special arrangements for environmental liabilities would have to be made if the Route were to be used regularly by vessels with pollution potentials.

- 33. Trade and commercial shipping aspects were also discussed at the Tokyo Symposium. However, the concentration here was more fragmented. One direction taken was the Russian interest in the development of the Russian "North" which has lagged and, in many cases, been drastically reduced since the collapse of the USSR. The thrust here is for foreign investment, which would access the abundant natural resources in the region and, at the same time, lead to regional, infrastructural development.²³ Evidence of this development was provided by presentations from a Finnish group which has been engaged in oil and gas transportation from the region for the past three years.²⁴ This type of experience will undoubtedly be a valuable precedent for other commercial interests and shipowners who are considering investment and trade in the area. For example, the Finnish presenters conceded that costs at the moment were far above profits and that any investment would have to be for the long term. They also stated that marine insurance costs were very high and that Russian cooperation was variable. For example, ice-breaker assistance involved extremely high charges, far beyond cost recovery.
- 34. On the other hand, the Tokyo meeting heard relatively little on the expected use of the Northern Sea Route by commercial transit operators. The importance of the Route was reemphasized by Dr. Willy Oestreng, the Director of the Fridtjof Nansen Institute in Oslo, one of the principal INSROP organizations, in his keynote opening address. He reiterated that the attraction of the Northern Sea Route had two aspects: firstly, the fact that as 80 per cent of global industrial production takes place north of 30 degrees North Latitude, and some 70 per cent of all major global metropolitan areas are located north of the Tropic of Cancer, there is an obvious distance advantage in the use of the Northern Sea Route between Pacific and Atlantic

ports, when compared to the Suez and Panama Canals. For example, the Northern Sea Route distance from Yokohama to Hamburg is about 6,600 nautical miles, as against 11,400 nautical miles via Suez. This could lead to a freight rate saving of some 42 per cent. Several other examples of Northern Sea Route use illustrate its potential as a viable alternative which, in the summer season, could reduce the Japan to Europe passage by 10 to 15 days.

- 35. The second aspect emphasized in Dr.Oestreng's speech, referred to the Northern Sea Route's access to the rich resources of Northern Russia. This access would provide a new route to world markets, whilst at the same time, develop an important Russian region with its commensurate spin-off advantages. Yet the shipping industry has not shown the interest initially expected:
 - "...shipping companies the world over have shown scant interest in the distance savings offered by the NSR. More important to them is whether reduced distances can be translated into reduced carrying times, thereby lowering costs on a year-round basis. What Soviet and Russian vessels have demonstrated to date is that reduced distances can be translated into reduced carrying time during certain periods of the year. What remains to be shown is whether it is possible to achieve reduced freight times all year round at costs lower than those involved in using the existing sea routes." 26
- 36. At the Tokyo Symposium only one paper attempted to address this issue and then only in a rather theoretical fashion.²⁷ On the other hand, one of the very few shipping industry representatives present at the Symposium, Mr.Nils Telle, the Head of Research of the Norwegian Shipowners' Association, in an address to the Symposium's closing session, suggested that the shipping industry was not yet convinced that the Northern Sea Route was viable. He pointed out that a traditionally conservative industry, which had been undergoing

severe financial difficulties, would not simply abandon its traditional routing practices unless there were some very clearly measurable advantages, which would reduce cost as well as economic and other risks. However, other, recently published INSROP Working Papers, have now addressed some of the commercial and economic information which must "underpin" any Northern Sea Route viability. One study, which examines potential cargoes from and to Europe via the Northern Sea Route also concludes that most shippers are totally unaware of the NSR alternative and base much of their scepticism on lack of information. Another INSROP Working Paper examines current and potential oil product export from North West Russia and has some cautiously optimistic conclusions. 29

One of the most interesting recent papers, which actually attempts to make some economic forecasts of the potential of the Northern Sea Route for regular cargo service, concludes that, as can be presently foreseen, only the right types of cargoes with suitable vessels can achieve economic returns equal to what may be possible on other routes during the season when minimal ice breaker support is required. However, the paper also concludes that the Northern Sea Route is a viable alternative to the Suez Route for commercial trades where cost is more critical than fixed schedule.³⁰

37. Mr. Nils Telle also suggested that if the Northern Sea Route were only viable for a certain part of the year, ship operators would be faced with having to reposition their vessels at least twice a year. Although this could be done, it is not normal practice and would have to be worth it. In the closing session some other problems facing potential shipping operations were pointed out. These included: the uncertainty of Russian ice-breaker charges; the reliability of

radio and other communications systems; the reliability of Russian weather and ice reports; the uncertainty of Russian legislation relating to the use of the route; the aging Russian Arctic fleet available to carry out some of the transportation requirements; and a number of other concerns.

- 38. Nevertheless, the INSROP marine insurance sub-project's research, especially in London and, most recently, in Russia, seems to indicate an increased awareness in Russia that full disclosure of relevant Northern Sea Route information, located in Russia, is essential.³¹ Furthermore, experience and statistics in this area are being constantly compiled.³² Russian shipping has already a fairly lengthy relationship with London and Norwegian underwriters and P&I clubs and the quickly increasing Russian private commercial and shipping sector will not only develop more "Western" commercial "thinking" but, at the same time, induce the former state shipping and insurance companies to join in the process through healthy competition. For example, the Murmansk Shipping Company has 55 years of experience in the Arctic and, at present, operates a 50-vessel fleet, including three nuclear-powered and seven standard ice breakers.
- 39. At this stage the INSROP information base must now provide some real answers to those who will have to make the commercial and risk assessment decisions required to make the Northern Sea Route a viable alternative. This brings us back to the information required by insurers in order to provide them with a better system on which to base marine insurance premiums. Information is especially required in twelve practical areas:

- a. Ship operators involved and details of their previous Northern Sea Route (NSR) experience;
- b. Precise information on the actual routes contemplated;
- Availability and accuracy of the hydrographic, meteorological and ice information along the NSR;
- d. Details of the vessels to be used;
- e. Value of the vessels be used. This includes "actual" and insured" value and the degree of "co-insurance" or "deductible" which might be considered;
- f. Time period of contemplated navigation;
- g. Loading and discharge ports and ports of call en route;
- h. Experience of shipboard personnel in Arctic navigation;
- Marine insurance claims history/statistics of the vessels to be used and/or the vessels' owners, operators, managers, charterers;
- j. Types of cargoes to be carried and the value of such cargoes
- k. Availability, reliability and types of navigational aids along the NSR as well as icebreaker, towage and salvage assistance available;
- 1. Access to survey organizations, ports of refuge etc.
- 40. The next stage of the INSROP Programme generally, and the marine insurance subproject specifically, must concentrate on addressing the expressed and anticipated concerns of the commercial sector as without this support the Northern Sea Route will remain little but an academic exercise. This will require some further "missionary" work in the London, New York,

Tokyo and Norwegian insurance and shipping markets which, so far have not been sufficiently involved in or consulted by INSROP. The marine insurance sub-project has most recently held very significant discussions with leaders of the London market and will shortly be following up in the Tokyo counterpart. The results of such meetings will be published in an expanded, final INSROP Working Paper in 1996. In addition, the Norwegian-Finnish Kvaerner Masa-Yards group, who are INSROP's largest private sponsor, are planning an evaluation project in 1996, which involves a realistic, hypothetical voyage of a vessel carrying ore along the Northern Sea Route, depending on available INSROP data. This project should also be completed with publicized results later in 1996. The marine insurance risk factor will be part of this evaluation project. The combination of involvement, a reliable information base, field-tested data, and at least some assurance that there is commercial viability, should provide INSROP with the necessary "bottom-line" which should turn an ambitious international research project into commercial reality.

NOTE ON THE AUTHORS

Edgar Gold, Q.C., Ph.D: is the INSROP Project IV.3.3 supervisor. He is a senior partner with the Halifax, NS, Canada, law firm Huestis Holm and the Immediate Past President of the Canadian Maritime Law Association. He is Adjunct Professor of Maritime Law and Resource and Environmental Studies, Dalhousie University, Halifax and Visiting Professor of Maritime Law at the World Maritime University, Malmö, Sweden. He is also a Master Mariner with 16 years of merchant marine service, including several years in command. He is a Senior Research Associate and Member of the Board of Directors of the Oceans Institute of Canada.

John A. Cantello, B.A. (Hons.), A.C.I.I., C.I.P.: is a Senior Vice-President and Director, with Messrs. Osborn & Lange, Inc., Insurance Brokers and Average Adjusters, of Montreal QC, Canada. He is also the Secretary-Treasurer of the Canadian Maritime Law Association. Mr. Cantello has been in the marine insurance business in the United Kingdom and Canada for over 50 years as a broker, average adjuster and lecturer in the field. He has built up strong connections in the Canadian, London and New York marine insurance markets during his lengthy career. He is a Senior Research Associate with the Oceans Institute of Canada.

Peter L. Wright, C.Arb.: is a marine insurance consultant and maritime arbitrator in Vancouver, BC, Canada. He is the Secretary of the Vancouver Maritime Arbitrators Association and a Member of the Canadian Maritime Law Association. He has been directly involved in the marine insurance area for almost 50 years as a broker, underwriter, consultant, lecturer and arbitrator. During his lengthy career he has established strong connections in the Canadian, London, and Tokyo marine insurance markets. He is a Senior Research Associate with the Oceans Institute of Canada.

The Oceans Institute of Canada/Institut canadien des océans: is the base for INSROP Project IV.3.3. The Institute is a federally incorporated, non-profit organization established in 1976 with its head office in Halifax, NS, Canada and a regional office in Vancouver, BC, Canada. The Institute is considered to be Canada's centre of excellence dedicated to promoting responsible management of the world's oceans and sustainable development of marine resources.

REFERENCES

- 1. This Working Paper is based on a presentation made at the INSROP Symposium, Tokyo, Japan, October 1995. See, Gold, Edgar, "The Northern Sea Route: Is it a Viable Marine Insurance Risk?" Tokyo Proceedings, 1995.
- 2. INSROP is a three-year (1993-96), multidisciplinary and multilateral research programme divided into four sub-programmes: Natural Conditions and Ice Navigation; Environmental Factors; Trade and Commercial Shipping Aspects of the Northern Sea Route; and, Political, Legal and Strategic Factors. The thee principal cooperating partners are: Central Marine Research and Design Institute (CNIIMF), St. Petersburg, Russia; Ship and Ocean Foundation (SOF), Tokyo, Japan; and the Fridtjof Nansen Institute (FNI) of Oslo, Norway.
- 3. This is the second Working Paper in a series of 3-4 papers to be completed under this sub-project. The first Working Paper, completed in 1994, contained a pilot study on the subject. See, Torrens, Diana L., "Marine Insurance for the Northern Sea Route: Pilot Study". INSROP Working Paper No.1-1994, IV.3.3.
- 4. See, for example, Ivamy, E.R.H., <u>Marine Insurance</u>, 4th Ed. (London: Butterworth, 1985) p.3
- 5. United Kingdom, "Marine Insurance Act 1906". The 1906 British act, which has its antecedents in 17th Century civil law, is generally followed in most states.
- 6. "Stated Perils" under the normal English marine insurance policy. Norwegian and Japanese policies provide an "All Risk" concept.
- 7. Such as under ITC, American Hull Form or Norwegian Conditions.
- 8. "Advisory Rates for Arctic Voyages (Canada)", 1985.
- 9. Such as the "Hague", "Hague-Visby" and "Hamburg" Rules.
- 10. See, for example, Hazelwood, S.J., <u>P&I Clubs: Law and Practice</u>. (London: Lloyd's Press, 1994).
- 11. Most European have accepted the "Hague-Visby" Rules; some states have accepted the "Hamburg" Rules, but Russia and Japan are still subject to the "Hague" Rules of 1924.
- 12. TOVALOP and CRISTAL. It should be noted that these private compensation schemes will be phased out in 1997.
- 13. The CLC and FUND Conventions.

- 14. Gold, Edgar, Handbook on Marine Pollution. (Arendal: Gard, 1985).
- 15. Since 1984 attempts have been made to establish a global compensation and liability regime for the ocean carriage of hazardous and noxious substances (HNS) at the IMO. This has so far not been successful. A further attempt will be made in April/May 1996.
- 16. Government of Canada, "Arctic Pilot Project", Vol.4, Part B, 'Operating Costs', p.15.
- 17. Canadian Board of Marine Underwriters, "Advisory Rates for Arctic Voyages (Canada)", 15 January 1985.
- 18. INSROP Working Paper No.11-III.10.1: Anderson, O., Heggeli, T.J., and Wergeland, T.J., "Assessment of Potential Cargo from and to Europe on the NSR" (1995); and INSROP Working Paper No.8-III.01.3: Ramsland, T.R., "Oil Product Export from North West Russia" (1995). Also, INSROP Discussion Papers: Yakovlev, A.N. et al, "Political Aspects along the NSR" (1995); Anderson, D.G., "Indigenous Peoples and Development of the Lower Yenisei Valley" (1995); Osherenko, G., "Property Rights and the Transformation of Russia: Institutional Change in the Far North" (1995); Frolow, A.L., and Khanin, M.S., "Some Aspects of the Foreign Trade Regime of the Russian Federation" (1995); Kolodkin, A.L., "International Law and Arctic Waters" (1995). Also, Larsen, L.-H., Evenset, A., and Sirenko, B., "Marine and Anadromous Fish and Invertebrates; The Coastal Zone; Large River Estuaries and Deltas" (1995).
- 19. Yamaguchi, H., "NSR Sea Trial Test", Tokyo Symposium Papers (1995)
- 20. Tokyo Symposium Papers: Technical Sessions Theme I and Theme I-2 (1995).
- 21. Tokyo Symposium Papers: Technical Session Theme II (1995).
- 22. Roginko, Alexei Y., "The NSR in the Context of Arctic Military and Ecological (Environmental) Security". INSROP Working Paper No.13-1995. IV.2.1.
- 23. Granberg, A., "The Significance of the NSR for Regional Development in Arctic Areas of Russia"; and, Hoifodt, S., "The Northern Sea Route and the Regional Development in the North". Tokyo Symposium Papers (1995).
- 24. Niini, M., "Experiences of Three Years of Oil Transportation in the Russian Arctic with a Western Fleet"; and, Backlund, A., "Seaborne Oil and Gas Transportation from Northern Russia". Tokyo Symposium Papers (1995).
- 25. Oestreng, Willy, "Introduction to INSROP". Tokyo Symposium Papers (1995).
- 26. Ibid
- 27. Schwarz, J., "Can the Northern Sea Route be Profitable?" Tokyo Symposium Papers (1995).

- 28. Andersen, Oeystein, Heggeli, Tore J., and Wergeland, Tor, "Assessment of Potential Cargo from and to Europe via the NSR". INSROP Working Paper No.11-1995, III.10.1
- 29. Ramsland, Trond R., "Oil Product Export from North West Russia". INSROP Working Paper No.8-1995, III.01.3.
- 30. Buchan, Bruce, "The Potential of the Northern Sea Route for a Regular Cargo Service". INSROP Working Paper No.15-1995, III.07.2.
- 31. Loset, S. and Vefsnomo, S., "Content of Database, Planning and Risk Assessment". INSROP Working Paper No.5-1994, I.5.1.
- 32. Gavrilo, M. and Sirenko, B., "Initial Survey of Russian Data Sources". INSROP Working Paper No.9-1995, II.1.

APPENDIX

Review by Jan Lunde, Managing Director UNITAS Assuranceforening, Oslo/Arendal, Norway.



Oslo: P. O. Box 1290 Vika 0111 Oslo, Norway Telephone: 22 33 49 70 Telex: 71 076 Telefax: 22 42 38 67 Claims Dept.

Telefax: 22 42 38 67 Claims Dept. Telefax: 22 41 50 43 Underwriting Dept. Company code: 948352877 Arendal P. O. Box 1564 Myrene 4801 Arendal, Norway Telephone: 37 01 92 00 Telex: 71 076 Telefax: 37 02 65 70

Oslo, 28. February 1996

International Northern Sea Route Programme (INSROP) c/o The Fridtjof Nansen Institute P.O.Box 326 1324 Lysaker

Re.: Invitation to be Reviewer for Project IV.3.3: "Marine Insurance For The Northern Sea Route", by Edgar Gold, John Cantello, and Peter Wright. Your letter dd. 12.02.96

It is an honour for me to be asked to be appointed reviewer in respect of INSROP - Discussion Paper prepared by Edgar Gold, John Cantello and PeterWright.

The Paper has been examined with great interest. The immediate reaction after having read through the Report is that the Northern Sea Route is indeed an interesting adventure. The problems and uncertainties that exist seem at first glance to be overwhelming. Thus INSROP are facing a number of challenges as clearly demonstrated in the report under review.

The object of Project 3.3 is to examine the possibility of providing sufficient marine insurance coverage for commercial shipping activity in the Northern Sea Route. Clearly enough the group is in no way in a position to give a full answer to this question. However, a fairly precise conclusion is given by the group itself (p.14): "However, in general there is reason for optimism. Marine insurers, although belonging to a predictably conservative industry, also have a well-deserved reputation for responding to commercial demands and changes in a positive, innovative manner".

From a practician's point of view I think this is an accurate description of the marine insurance industry. However, most probably it would be a relatively costly project - at least initially - until more statistical information (showing claims frequency etc.) has been collected.

The Report gives in my opinion a correct description of today's marine insurance market, how it operates and what insurance needs a trader shall have to consider when sailing in the waters in question. However, allow me to give the following comments:

In the Introduction, 1-3 it would perhaps be easier for the reader if an indication was given as to where to find the respective items under discussion, fx cargo risks (art. 4-11,12). However, this may mean that art. 1-3 has to be somewhat extended, giving room for a short presentation of the various topics under discussion.

Under art. 3 Hull and Machinery coverage is being discussed. My first comment here would be to express the view that Loss of Hire (LoH) insurance which is a separate cover offered by the hull & machinery underwriters should have been included in the presentation. Particularly so as the time factor may quite often be of great importance in connection with a damage to the vessel in arctic waters far away from any repair yard.

As correctly stated by the authors the sum insured in a hull & machinery policy will in most instances have been agreed by the parties involved as a fixed amount. Without going into detail with respect to all standard and special clauses in an ordinary hull & machinery policy it ought perhaps to be mentioned that some items will be covered in excess of the sum insured. Suffice here to mention expenses incurred in order to salvage the ship. Such expenses may in arctic waters be quite substantial.

Another observation would be to point out that although the intention of the different marine insurance conditions (such as ITC, American Hull Form or Norwegian Conditions) would be to cover the same object, viz. the ship some differences do exist between the various insurance conditions. An important difference has already been mentioned under art. 3-9. However, other differences also exist, for example under Norwegian conditions a CTL may be declared once the estimated cost of recovery/repair have exceed 80% of the recovered/repaired ship, and not 100% which is the case under English and American conditions.

However, without having to go into too much details in this respect it might be advisable for the authors to make a more general reservation under say art. 3-7 with respect to alternative solutions under the various insurance conditions.

I presume under art. 5 it is due to an oversight that no reference has been made to the fact that a P&I club also is based in the US. P&I cover has as correctly stated by the authors traditionally been unlimited with an exception of pollution claims. As from 20th February this year the P&I clubs have, however, after some discussions agreed that the cover they offer may be limited to approx. USD 20 bill.

With respect to Marine Pollution Claims, art. 6, it is correctly stated that coverage is normally available up to a ceiling of USD 500 million. In special cases, however, this may be raised to USD 700 million and not USD 800 million as stated.

Under art. 7-25 the authors are discussing the role of the London market as to the question of considering the Northern Sea Route an acceptable marine insurance risk. Although this subject may be open to discussion the writer tends to be of the opinion that the statement made by the authors was definitely correct some years ago. Today, however, I would not be so sure whether it would not be possible to open such a cover without the participation of the London market. In this respect the capacity offered by reinsurers on the European and US continent plays an important role. To say it in fewer words: London should still be considered the most important single, marine insurance market in the world. It's role, however, in today's market is not as dominant as it used to be.

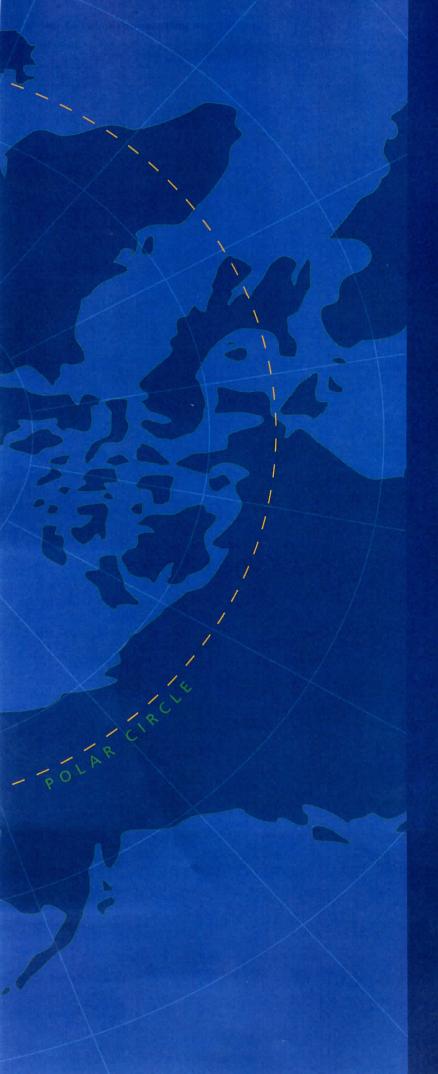
The marine insurance market - particularly the hull and machinery market is a market which changes quickly. While the capacity offered seemed to dry out during the period 1991 -1994, with constantly increasing insurance premiums, the market has during the latter part of 1995 and so far into 1996 shown an increased capacity with hull and machinery premiums down again at a pre-1992-level. In other words the statement made in **art.** 7-26 as to a present lack of capacity should be somewhat modified.

I wish the authors and INSROP as such all the best with the further work to be done.

With kind regards

Unitas

Jan Lunde man.dir.



The three main cooperating institutions of INSROP



Ship & Ocean Foundation (SOF), Tokyo, Japan.

SOF was established in 1975 as a non-profit organization to advance modernization and rationalization of Japan's shipbuilding and related industries, and to give assistance to non-profit organizations associated with these industries. SOF is provided with operation funds by the Sasakawa Foundation, the world's largest foundation operated with revenue from motorboat racing. An integral part of SOF, the Tsukuba Institute, carries out experimental research into ocean environment protection and ocean development.



Central Marine Research & Design Institute (CNIIMF), St. Petersburg, Russia.

CNIIMF was founded in 1929. The institute's research focus is applied and technological with four main goals: the improvment of merchant fleet efficiency; shipping safety; technical development of the merchant fleet; and design support for future fleet development. CNIIMF was a Russian state institution up to 1993, when it was converted into a stockholding company.



The Fridtjof Nansen Institute (FNI), Lysaker, Norway.

FNI was founded in 1958 and is based at Polhøgda, the home of Fridtjof Nansen, famous Norwegian polar explorer, scientist, humanist and statesman. The institute spesializes in applied social science research, with special focus on international resource and environmental management. In addition to INSROP, the research is organized in six integrated programmes. Typical of FNI research is a multidisciplinary approach, entailing extensive cooperation with other research institutions both at home and abroad. The INSROP Secretariat is located at FNI.