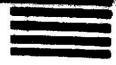
## CONSEIL DE L'ATLANTIQUE NORD NORTH ATLANTIC COUNCIL



EXEMPLAIRE N 170

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#### AD HOC STUDY GROUP ON SOVER OIL POLICY

REPORT BY THE NORWEGIAN DELIGATION ON SOVIET OIL TRANSPORT AND DELIVERY PROBLEMS

#### Note by the Secretary

Attached is a copy of the paper submitted by the Norwegian Delegation on the request of the Study Group(1). An advance copy has already been circulated.

(Signed) C. NEUVILLE

OTAN/NATO, Paris, XVIe.

(1) AC/127(0)R/1, II (5)

NOR-FGIAN DELEGATION

Paris, 24th December, 1960.

Dear Mr. Vincent,

Enclosed please find the paper which the Norwegian Delegation was invited to submit on Soviet oil transport and delivery problems (cfr. Decision Sheet AC/127(0)R/1).

The paper has been prepared by Norwegian officials and should in no way be taken to represent the considered opinion of the Norwegian authorities.

We hope, however, that it may serve a useful purpose in the future disdussions of the Ad Hoc Study Group on Soviet oil policy, and I should be grateful if you would circulate this letter with enclosure to the other members of the group.

Yours sincerely.

(Signed) E. ULSTLIN

Mr. A. Vincent, Deputy Head, Economic Section.

#### AD HOC STUDY GROUP ON SOVIET OIL POLICY

# INFORMATION PROVIDED BY NORWAY IN ACCORDANCE WITH DECISION TAKEN BY THE FIRST MEETING OF THE GROUP, 9th DECEMBER, 1960

## Memorandum on Transportation Aspects of Soviet Bloc Oil Exports

#### Soviet and World 011 Production and Exports, 1957-59

In the attached Table 1, figures are given for world and Soviet Bloc oil production and exports 1957-59. While production and exports in satellite countries have been stagnant, those of USSR have increased more rapidly than those for the world as a whole.

In 1959, Soviet oil exports amounted to about 25.4 million tons, of which, however, about 10.8 million tons went to other communist countries.

Rumanian oil exports to USSR were 3 million tons in 1959: some went to other communist countries, whereas about 2 million tons were exported outside the Bloc.

Excluding inter-bloc trade, the Soviet Bloc exports stood at about 16.5 million tons in 1959, or about 4% of total world exports.

### Destination of USSR Oil Exports

Information on this topic, based on USSR statistics, have been given in Petroleum Press Service 1960, p. 329 f., ofr. NATO working paper AC/127(WP)66.

As already mentioned, 10.8 million tons in 4959 were exported to other communist countries, another 10.7 million tons to non-communist European countries, and 3.8 million tons to others, i.e. Latin America, Africa and Asia.

#### Soviet Bloc Seaborne Oil Exports

The exports statistics as such do not show how the oil has been transported. It is known, that most of the exports to European satellites are exported by land, largely by rail. The new pipeline system (ofr. below) will soon cover most of these requirements. Part of the Polish imports are, however, taken by tanker from the Black Sea, and in Eastern Germany Rostock is being developed as a large importing port (cfr. Patroleum Press Service 1960, p.349). Statistics are not available to show which part of Chinese oil imports is carried by land and which by sea.

To countries outside the Soviet Bloc, practically all oil is being transported by aca.

Thus, seaborne exports of Soviet Bloc oil in 1959 must. have consisted of:

USSR/Western Europe	10.7 million tons
USSR/other free world	3.8 million tons
Rumania/free world	2.0 million tons
Total	16,4 million tons

plus a minor part of the 10.8 million tons sent from USSR to other communist countries, plus some satellite/satellite trade. The sum total may be about 20 million tons scaborne oil exports.

Thus, Soviet Bloc oil exports in 1959 accounted for 4-5% of the international seaborne sil trade.

Allowing for tankers laid up, engaged in the grain trade, or in United States coastal/intercoastal trade, the active world tanker tonnage in international trade averaged during 1959 about 46-47 million dwt. It can thus be estimated that those tankers, on an average, carried 9 times their deadweight tonnage in the course of the year (equal to about 10 trips per ship).

Soviet Bloc seaborne oil exports were largely over short hauls. It may be estimated that the 14.5 million tons USSR exports to free world during 1959 could have been carried by tankers making on the average about 12-13 round-trips per year. Thus, it seems that, even allowing for repair time etc., a tanker fleet of about 1.25 million dwt. would have sufficed to carry those exports. That would be equal to 2.5% of total world tanker tonnage, and 3% of that actively engaged in international oil transportation.

#### Soviet Bloc Oil Exports 1960, and Geographical Pattern

According to Petroleum Press Service 1960, p. 445, USSR oil exports to free Europe are expected to reach 15 million tons during 1960, as against 10.7 million during 1959. Exports to several non-European countries have risen very strongly; a 3 year trade agreement with Japan provides for 830,000 tons during 1960, leaving 3.4 million tons to be imported in 1961/62. Brazil is to take 600,000 tons annually 1960-62, cfr. PPS p.330. Russia has also undertaken to cover Cuba's requirements, which for 1959 were about 34 million tons. Allowing also for Rumanian oil exports, the deliveries have not only increased in magnitude, but even more in tonnage requirements, as one can fairly reckon only 6 round voyages per year Black Sea/Cuba and 5 or 5.5 Black Sea/Japan.

BLAQUE

# Slack Sea. Size of Tenkers employed

Almost all the Bloc's seaborne exports are sent from ABlack Sea ports, Batum, Tuapse, Movorossiak, and to some extent odessa in USSR, and the Rumanian port of Constanza.

With the exception of Novorossisk, these ports only provide for vessels with drafts about 30 feet, that is to say that tankers must be well below 20,000 dwt. to be able to load full pargoes. As will be shown below, almost all the oil has actually been shipped in tankers of 12-18,000 dwt.

At Novorossisk, it seems possible to take tankers with draft of about 36 feet or about 40,000 dwt.

At Batum, it would probably be easy to arrange a "sea berth" for loading at moorings in deep water far from the shore, so draft limitations might be overcome.

For "products", importers would probably in any case prefer to receive the cargoes in "handy size" tankers. Products and up 55% of USSR exports in 1959.

For crude, refineries might easily take larger cargoes, if they could thus obtain lower prices or freights. For short hauls, the limitations of draft and size, is wever, of little importance to the cost of transportation are this for USSR's ecompetitive position.

For longer haus, larger tankers yield the better transport economy. As already mentioned, the possibility exists for Justing them at Novorossisk, and it is clear from recent USSR tonnage worders and purchases, that supertankers will in the future be used to an increasing extent.

### Saltic Ports, Pipcline System

Some oil exports also take place from Klapcida (Lemel) in the Baltic, but it has hitherto been a mere trickle.

The pipeline system from the Volga/Ural area to Central Europe and the Baltic is expected to be finished by 1963 and may have a capacity of 16 million tons per year. The branch to Eklapeida will very soon be in operation.

It will substitute some tanker and much rail transportation to Central European satellites, and largely increase the USSR Cability to ship oil from the Baltic to Finland, Sweden and other Northern countries, replacing Black Sea exports, and thus reduce Ctanker requirements.

Lt Klapcida itself, however, draft is limited to about 22 feet or to tankers of 4-5,000 dat. This explains the great USSR interest in this size of tankers, cfr. below.

Also through Siberia a great pipeline system is being developed. There are plans for pipelines all the way to the Pacific coast, in which case the tanker haul to Japan would dwindle to a fraction and Black Sca exports to the Far East might be discontinued. From the point of view of transport economy, it may be doubtful whether such long piping will be cheaper than shorter piping to the Black Sea plus long tanker voyages.

#### Soviet Bloc Tanker Tonnage

The oil exports of the Soviet Bloc are partly carried in their own and partly in other tanker tonnage.

Table 2 shows how Soviet Bloc and world tanker tonnage has developed during recent years.

As will be seen, the Soviet Bloc tanker fleets are comparatively small, but they have increased even more rapidly than world tanker tonnage, and last summer accounted for 2%, with the Russian fleet as by far the largest within the Bloc.

Lloyds Register gives the following information on the size and age distribution of Russian tankers as per 30th June, 1960. The figures are in gross tons. As I gross register ton for tankers corresponds to just over 1.5 deadweight ton, this table corresponds well with Jacobs' figures, particularly bearing in sind that the latter excludes vessels under 2,000 dwt. - see Table 3.

As appears, the major part of the Russian tanker fleet consists of tankers in the group 6-10,000 grt., that is about 10-16,000 dwt. About 85,000 grt. or 130,000 dwt. are less than 4,000 grt. or about 6,000 dwt.; these vessels will barely be used in other foreign trades than in the Baltic and adjacent waters. Of tankers over 10,000 grt., Russia as per 30th June, 1960, had only 3 units.

It also appears from Table 3 that the major part of the Russian tanker fleet has been built during redent years. In fact, the new building programme started about 1951, since when 85% of the present fleet has been built.

## Soviet Bloc Tanker Building Programme, and other Tanker Acquisition

During the early postwar period, little was done to renew or augment the USSR merchant fleet. The development started in earnest about 1951. Of the total USSR fleet at the end of 1959, 3.5 million grt., 2.2 million grt. had been acquired

during 1951-59. One third thereof had been built in USSR, and enother third in other communist countries. Finland had delivered 13%, leaving 20% from other sources.

The 7-year-plan for 1959-65 implies that an even larger propertion of the tonnage increments will come from USSR and other Bloc yards.

Allowing for some scrapping, this would imply purchases and new building of 5-6,000 grt., of which it appears from Table 2 that about 100,000 grt. may have been acquired by 30th Junc, 1960. This would leave 4-5,000 grt. or 600-750 dwt. on order on that Zdate or to be ordered or bought with delivery before the end of 1965.

The attached Table 4 shows Soviet Bloc orders as known per 30th June, 1960. It embraces 31 vessels of 289,300 dwt. It is interesting to note that 23 of the vessels with one third of the tonnage are in the 4,000 tons class, cfr. above for Baltic requirements.

The list is surely not complete. It must be assumed that more tankers were on order at USSR yards, and also at Polish yards for USSR account.

The Polish shipbuilding programme for 1960 delivery comprises 72 vessels of 272,000 grt., of which 63% for exports, largely to USSR. The tanker portion of the total has not been stated.

Anyhow, the capacity exists for the construction of tankers of 35/40,000 dwt., and a shipbuilding drydock for vessels up to 65,000 dwt. is under construction.

Polish shipbuilding is clearly taken into account in the USSR 7-year-plan. Reports from Poland, Spring 1960, were for Russian orders of 122 vessels of 850,000 dwt. with delivery \$\in\$1961-65, including tankers.

Early in 1960, a trade agreement between USSR and Japan made provision for 5 tankers of 18-20,000 dwt. to be built in Japan for USSR account. These tankers have apparently never about ordered.

In August, 1960, a mission from Sudoimport (Soviet Ship Import Corp.) went to Japan to negotiate shipbuilding orders. "Japan Shipping & Shipbuilding" for December 1960 reports that these negotiations have resulted in orders i.e. for 4 tankers of 35,000 dwt. each, with delivery 1st half 1962. They also resulted in the purchase of 2 new tankers, of 39,200 and 40,000 dwt. respectively. These vessels had been ordered by "flags of convenience" owners, who had, however, not taken delivery of them.

This deal alone implies the acquisition of 6 tankers of 220,000 dwt.

Also other communist countries have shown great interest in the acquisition of tankers. Thus, Rumania has recently made inquiries in Japan for the construction of 4 tankers of 10-15,000 dwt. each, clearly intended for Constanza loading.

During 1960, 3 Swedish tankers have been sold second-hand to Soviet countries, all of about 13,000 dwt. Two of the sales were to Fastern Germany and took place in the Spring, one to Bulgaria in the Autumn. Table 2 may include one of the first tankers, but at least 2 are in addition to the statistics given there.

Interest has also been shown by USSR for tanker ordering or purchased in other countries than the Soviet Bloc and Japan.

It is clear that Soviet tanker tonnage after 1st July, 1960, will increase even more rapidly than earlier, and no difficulty in fulfilling the 7-year-plan even before 1965.

#### USSR Shipping Policy

In Times for 21st November, 1960, reference is made to USSR maritime transport and policy. In 1950, USSR imports and exports accounted for 40,200 million ton-miles out of total maritime transports of 57,000 million ton-miles. Thus, 70% of the ton-miles were in foreign trade. The ton-mileage in foreign trade is planned to trable by 1965.

It is also stated that USSR vessels in 1958 carried 58% of USSR imports and exports, and that it is intended to increase this proportion to 75% by the end of the 7-year-plan.

Note A study is being made of the transportation of oil from the Black Sea during 1960, by destination, by flag and for various parts of the year. This study would give more precise information on these topics than available at the time of writing. Some of the observations below are therefore only tentative. The study is expected ready before the meeting early January 1961.

#### Tonnago Requirements

Reference is made to Table 5. It appears that in 1959 USSR oil exports to non-Bloc countries could have been carried by a flect of about 1.25 million dwt. in continuous employment (including repair time). Including Rumanian exports, about 1.5 million dwt. would be required. In addition, the seaborne trades within the Bloc itself would claim tanker tonnage, which perhaps may be estimated from the special study.

With the large increase in USSR exports in 1960, to Western Europe and particularly to Latin America and Japan, it seems likely that about 2.5 million dwt. will have been needed to carry the Bloc's exports to other countries this year.

Assuming that satellite tonnage is employed in interbloc trade only, and roughly reckoning that only USSR tankers over 6,000 grt./9,000 dwt. have been employed in the exports, USSR would have had about 600,000 lwt. available through 1959 and about 800,000 dwt. through 1960, capable of lifting half the experts in 1959 and less than half in 1960.

In any case, the balance is being carried by other tonnage.

#### Chartering for Soviet Bloc Exports: 1st half 1960

Most charters for non-bloc tennage are known on the tanker freight market. A compilation for charters made between 1st January and 9th July, 1960, when ESSO declared its blockade of owners chartering vessels for Soviet oil exports, comprise 112 charters. Some 19 of these charters were known to be for non-Soviet account, 4 for Chinese or Polish account, 72 known to be for USSR account, leaving 17 for unknown account.

It is thus clear, that the predominant part of the oil is being sold cif, even more so as some of the charters for USSR account were for consecutive voyages, t/c/p or transportation of large quantities, and as it perhaps may be assumed that all exports by Soviet tankers take place on cif basis.

On the other hand, the list does not contain vessels belonging to or on t/c/p to the importers themselves.

The vessels incl d in the list had an average cargo capacity of 16,133 tons increating 17/17,500 dwt. Only 8 had cargo capacities of 20,000 tons and more, maximum 24,000 tons.

Of the charters listed, 90 were for one single voyage only, comprising 1.452.000 cargo tons.

The remaining 22 were for consecutive voyages, time, or were transportation contracts, where the owner undertakes to ship a certain quantity over a period. Applying in a few cases estimates for the number of voyages covered (i.a. on t/c/p), it was found that these 22 charters or contracts provided transportation of 4.680.000 cargo tons, making a total of 6,132,000 tons during just over 6 months, or 1 million cargo tons per month, which may indicate about 1.1 to 1.2 million dwt. in continuous employment (allowing for bunkers and repairs).

This is <u>not</u> to say, that the same quantity was <u>shipped</u> under these charters during the period, several of the contracts are still running. On the other hand, several vessels were employed in these trades during 1960 on charters made in 1959 or perhaps even earlier.

what it does give, are minimum figures for chartering activity during 1st half 1960.

#### Chartering for Soviet Bloc Exports, 2nd half 1960

The number of fixtures and contracts reported on the market since 9th July, 1960, has been considerably smaller than In the earlier part of the year. Until 9th December, 1960, only 20 fixtures or contracts had been reported during just over 5 months, as against 112 during the first just over 6 months.

The number reported is, however, certainly much less complete during the later period. Several fixtures can be understood to have taken place. In many cases, the agreements have been made without the use of brokers.

Clearly, however, the blockade by ESSO and other oil companies have been effective in the sense that many owners have abstained from entering into charters for the carriage of Soviet Bloc oil.

On the other hand, it has not been effective in the sense that less tonnage has been fixed for such business.

The reported fixtures may be presented as felling in 3 groups:

- (a) 6 fixtures for single voyages, involving in all 96,000 tons of oil, a mere trickle as campared to lst half of the year;
- (b) 13 fixtures for consecutive voyages or time-charters. Reckoning 12 voyages per year for the latter, this group covers the transport of 1,681,000 tons:
- (c) one large arrangement by the Mavroleon group (London & Cverseas Freighters Ltd.), covering 22 ships averaging about 20,000 dwt., or about 440,000 dwt. in all. This arrangement is said to be on the basis of consecutive voyages, and to last at least 2, at most 4 years. With 12 voyages per year, allowing 10% for bunkers, stores, etc., and reckoning 2 years only, this deal would provide transportation for 9.6 million tons of oil.

Adding up (a) 96,000 tons, (b) 1,681,000 tons, and the minimum figure for (c) of 9,600,000 tons, one arrives at about 11.4 million cargo tons. Thus, even on the most conservative calculation, the USSR chartering activity during these 5 months have provided for the transportation of considerably more oil than during the pre-blockade 6 months.

The nationality of the vessels fixed during the first 6 and the following 5 months of 1960 has undergone a marked change, as will be seen from Table 6, where the figures represent reported fixtures or contracts, not the number of trips to be made.

#### Black Sea Oil Trades, Importance to the Tanker Freight Markets

To appreciate the importance of the Soviet oil exports to the tanker market, one has to bear in mind various aspects.

Oil companies own directly or through subsidiaries nearly 40% of world tanker tonnage. About 60% of the tonnage is owned by "independent" owners, and the balance by governments, i.a. for naval purposes.

Of the independent tonnage, a major part is usually held on long term charters by oil companies, which by owned and long-term chartered tonnage thus usually cover 80-96% of their requirements, leaving 10-20% to the short-term market.

During the tenker market depression, which has lasted since Summer 1957, very few long-term charters have been made, leaving an unusually large proportion of the independent tankers on the short-term market or unemployed. Soviet oil exports have largely been transported under short-term charters. On this market, therefore, this trade has had quite another relative importance than might be gauged from its share of total world tanker tonnage employment. Westinform Shipping Report No.163 contains a study of voyage fixtures, including consecutives, lat January, 1959/31st March, 1960, which shows that 15.8% of the tonnage fixed was for Black Sea loading.

The tanker market depression has been long and severe. Rates have varied around an average of Scale - 45%, just enough to cover operating costs for tankers of 30/35,000 dwt. Super tankers of this and larger size have come to determine the voyage freight rates, which have been completely insufficient to cover even operating expenses for "handy size" tankers, let alone interest and capital charges. Therefore, owners of "handy" tankers have suffered most during the depression and "handy" tankers have dominated the lay up statistics.

On account of draft restrictions, etc., super tankers have largely been unable to compete for the transportation of oil from the Black Sea. "Handy size" tankers have therefore in those trades had a market of their own, with rates set by their own marginal costs, not those of super tankers.

According to the Westinform study, Black Sea loadings comprised 27% of all loadings under voyage and consecutive charter parties reported during 1959 and 1st quarter 1960 for tankers under 20,000 dwt.

#### Factors influencing the Tanker Market: United States Import Policy

A great many factors influence the tanker market. Freights are determined by supply and demand. Owners, oil companies and independents will react on increased demands by ordering new tonnage; independent owners will in this situation often be stimulated by oil company offers for long-term charters for new buildings as well as for existing tonnage. If the shipbuilding capacity appears to be a bottle-neck, the orders may be for delivery several years shead. Probably even the total volume of orders may then be larger than it would otherwise be. One result is that deliveries will have been predetermined for a long period, with small possibilities for downward adjustments if requirements fall short of expectations.

A tanker shortage developed in 1955/57, before and under the Sucz crisis, and this "mechanism" was started. As the contracted tonnage was delivered, a surplus of tanker tonnage ensued, leading to depressed freight markets and lay-ups. During Summer 1959, world tanker transportation capacity exceeded oil transportation requirements by about 18% (Jacobs). Most of this excess capacity was laid up, part was "hidden' by slow running or by the use of the Cape route instead of Suez, and part had entered the grain trades in competition with tramps. The surplus tanker capacity has also induced owners to sell war built and older - and also some newer tankers to the shipbreakers.

The tanker surplus was not only due to the large and predetermined new building programme becoming effectuated. Requirements were immediately reduced when the Sues Canal was re-opened, and the setback or stagnation in industrial production in North America and Europe resulted in a smaller than usual increase in oil consumption and import requirements from 1957 to 1958.

During 1959 and 1960, however, oil imports have risen sharply in Europe and most overseas countries. The one exception is the United States.

United States oil imports had increased rapidly during the 1950-ies, from 34 million tons in 1949 to 73 million tons in 1956. With a "voluntary" import restriction scheme in force, United States imports stood at 87 million tons in 1950. Early 1959, this scheme was abandoned and mandatory restrictions introduced, under which imports since Spring 1959 have been running at the latter rate.

Those restrictions have strongly influenced the severity and the duration of the tanker depression. Without them, the tanker surplus would presumably have been reduced during 1959 instead of increasing, and probably have been overcome altogether during 1960.

There may be no public estimate on what the magnitude of United States oil imports would have been in 1960 if they had not been hampered by restrictions, nor what its geographical pattern would have been. Any extrapolution from the earlier parts of the 1950-ies would, however, yield import figures tens of million tons higher than at present, and it seems likely that a larger percentage of the total would have come from distant sources (Middle East).

Even after allowance is made for reductions in United States coastal trades as consequences of larger imports, a liberialisation of United States oil imports would have led to a net increase in world tanker employment of several million dwt. Thus, 10 million tons of oil from Persian Gulf to USMH would require about 2 million dwt. in continuous employment (allowing for repair time).

Whether United States oil imports without restrictions would have been 20 or 40 million tons larger than today, and whether the bulk of the increase would have come from Venezuela or the Middle East, may be a matter of conjecture. In view of the fact that the tanker tonnage laid up in December 1960 is below 4 million dwt., much of which is inefficient, and about 2 million dwt. are employed in the grain trade, it seems likely that all efficient tanker tonnage would have been employed in the oil trades if there were no United States oil import restrictions.

#### Freight Element in Oil Prices

Crude oil, fuel and diesel oil are cargoes with a relatively low value per ton, cfr. e.g. the prices for bunker oil ranging from 87/10 per ton in the Persian Gulf to 133/6 in ports in the United Kingdom/Continent.

The freight cost is an important element in the cif price. At "Scale flat", freights are 32/6 per ton from N.W.I. to London, and 55/8 from Kuwait to London.

As for as maritime transport costs are concerned, Black Sea oil ports are favourably located for the supply of hediterranean ports and to less extent European Atlantic ports. On the other hand, exports from the Black Sea to Latin America and Japan involves long hauls, much longer than from alternative areas of supply.

Oil companies have to cover their average transportation costs in their sales prices, that is average for tankers taken on the short-term markets, those on long-term charter and for those which they own themselves. In the calculation of the AFRA rates, it is understood that owned tankers are included at the same freight level as for vessels on long-term charters.

AFRA rates, representing such average freight costs, are presently near "scale flat", whereas spot market rates during the last 3½ years have varied around an average of 45% lower, from Black Sea (handy size) between 30 and 40% below "scale flat".

It is in particular during the present tanker freight depression that USSR has entered the oil export markets. USSR has covered their transport requirements at low rates, a factor which has greatly increased their competitive strength. Thus, the tanker depression has helped to boost USSR oil exports.

At a higher freight level, say between "scale - 10%" and "scale + 30%" which may be taken to represent costs of transportation from owners' point of view(1) for super tankers and "handy size" respectively, USSR's competitive advantage on European markets would dwindle, and on the long hauls (Black Sea/Latin America; Black Sea/Japan) turn into a major disadvantage.

#### Concluding Remarks

Not only Soviet Bloc oil exports, but also its tanker tonnage has been increasing rapidly during recent years. There seems to be no reason to doubt that the 7-year-plan tanker programme can be fulfilled. On the contrary, it may well be fulfilled ahead of schedule.

The situation which arose Summer 1960 out of Cuban requisitions of refineries, has intensified Soviet Bloc tanker new building programmes, inside and outside the Bloc, and also motivated purchases of ready tanker tonnage.

The reactions of the oil companies have led many owners to abstain fro chartering their vessels for the transportation of Soviet Bloc oil. But they have not reduced the transportation capacity which USSR has been able to charter. On the contrary, that has increased, as some owners have made major arrangements for the transportation of USSR oil.

In view of the discrepancy between short-term tanker freight rates and the average transportation costs (as expressed by AFRA or other similar calculated average freights), USSR has

<sup>(1)</sup> That is to say, such rates are necessary as averages over long periods in order to cover operating costs, depreciation, and interest/profits on capital employed.

been able to take advantage of the depressed status of the tanker freight market. Es freights make up for a considerable share of cif oil prices, this advantage has been of major importance.

At higher freight levels, this USSR advantage would turn into a disadvantage, particularly where long hauls are involved and nearer, alternative areas of supply are available.

The situation on the tanker freight markets is influenced by a number of factors, one of them being the oil import policies pursued by major importing countries, particularly the United States the United States restrictions of oil imports have aggravated and prolonged the tanker marked depression, which would otherwise have been more or less overcome by the end of 1960.

Altogether, as provided for in the terms of reference of the Group, the problems posed to the Western world by the rapid increase in Soviet Bloc oil exports must be studied in a very wide setting, embracing i.a. such matters as:

effect on trade of the member countries; conservation of strategically vital resources;

the relative strength of Soviet and free world tanker fleets;

NATO shipping availability in emergency; tanker freight markets:

and also as a problem of peacetime transportation.

No solution can be found if attention is focused on the last factor only.

#### Table 1

# Oil Production and Export of Crude and Products from Sino Soviet Bloc (Figures in million tons)

#### Oil Production

	USSR	Rumania	Other satellites	World excl. of Sino Soviet Bloc	Total world
1957	98.0	11.5	3.1	768	881
1958	114.4	11.3	2.9	779	908
1959	129.0	11.5	5.7	831	977

#### . Export of Crude and Products

	V., 12	Out of Sino S from USSR i	Soviet Bloc From others	Total world exports(1)
1957		(7.7	)	376
1958		9.5	1.9	401
1959	•	14.5	2,0	(430)

Sources: NATO AC/127-WP/56. NATO AC/127-WP/66
Petroleum Press Service. United Nations Monthly Bulletin

<sup>(1)</sup> Seaborne exports, excluding from Venezuela to N.W.Is.

#### Table 2

## Tanker Fleets in Sino Soviet Bloc

From statistics compiled each year at 1st July by Lloyds Register and Lessrs. John I. Jacobs & Co. Itd. some information can be drawn concerning tanker fleets in communist countries. Tanker fleets belonging to "small" shipping countries are listed under the item "other countries" and can thus not be extracted.

ນຣເ	R C	hina	East Germany	Poland	Czecho- slovakia	Total Soviet Bloc	Total world	
		dwt.	1,000 dwt.	1,000 dwt.		1,000 dwt.	million dwt.	total world
1952 1	50		-	21 .		~171	31.1	0.5
1953 14	34	-	-	21		205	34.0	0.6
1954 28	35	-	· · · • . · ( )	<b>30</b>		<b>. 315</b>	37.1	8.0
1955 36	51		er er en mange andere e	30	Europaania (m. 1888)		40.0	1.0
1956 5:	LI	-	÷	30			43.0	1.3
1957 68	30	داهمانگاها ردمواد ا	e dente me e e e e e e e e e e e e e e e e e	39	• • • • • • • • • • • • • • • • • • •	719	47.0	1.5
1958 76	8	-		60		828	52.6	1.6
1959 79	96	-	23	73	19	911	58.7	1.6
1960 92	29	30	37	92	19	1,107	62.8	1.8

Table 3

Russian tanker fleet 1st July, 1960 (1,000 grt.)

Grt.	Under 5 yeers	5-10	10 <del>.</del> 15	15-20	20-25	25 and over	Total
100 - 500	_	-	-	_	0.5	_	0.5
500 - 1,000	0.8	-	-	2.0	2.1	0.8	5.7
1,000 - 2,000	3.7	25.1	-	<b>.</b>	3.5	1.8	34.2
2,000 - 4,000	39.8	3.4	-	2.3	***	-	45.5
4,000 - 6,000	<u>.</u> .	***	• ,	***		-	-
6,000 - 8,000	14.3	15.9	-		***	57.0	87.2
8,000 - 10,000	255,2	187.9		•	and the second s	8.2	453.3
10,000 - 15,000	***	-	-	_	-	14.8	14.8
15,000 - 20,000	19.5			-	-	-	19.5
20,000 - 30,000	•	-	-	e e e e e e e e e e e e e e e e e e e			-
30,000 and over	32.0	· · · · · · ·			🛌		32.0
Total	365.3	234.4	-	4.3	6.0	82.6.	692.7

Source: Lloyds Register of Shipping.

Table 4

Known Soviet Tanker Orders as per 30th June, 1960

Shipowner	No.	and size	Total tonnage dwt.	Country of Build
Polish Ocean lines	1	19,500	19,500	Yugoslavia
Polish Ocean Lines	1	19,000	19,000	Poland
USSR .	5	4,000	20,000	Bulgaria
USSR	16	4,000	64,000	Fintand
USSR	2	18,000	36,000	Poland
USSR	2	4,200	8,400	Sweden
USSR	1	27,000	27,000	USSR
USSR	2	40,000	80,000	USSR
USSR	1	16,000	16,000	USSR
Total, Poland	2		38,300	
" USSR	29		251,000	
Total	31		289,300	
Thereof:				
4,000 - 4,200 dwt.	23		92,400	
6,000 dwt. and over	. 8	<b>.</b> .	196,900	

The list is not complete, see text.

Estimate of tonnage requirements for USSR oil exports to free world 1959, assuming all oil being exported from the Black Sea

Importing countries	Mill. cargo tons	Days per round voyage	Voyages per year	cap	rgo acity rements
W.R/Lebanon	2.4	14	24	100	000
Other Mediterranea	n 4.0	16	21	190	000
United Kingdom/Continent incl.Denmar	- k 2.5	31	11	230	000
Scandinavia, excluding Denmark	4.0	36	9	<b>44</b> 0	000
South America	1.0	52	6.5	150	000
Japan	0.1	64	5.3	20	000
Total included average	14.0	27	12.4	1,130	000
Allowance for bunk	ers & s	tores, etc.	10%	113	000
Tonnage in continu allowing for repai		loyment,	·	1,243	000 dwt.

The table covers 14.0 million tons out of 14.5 million tons exported from USSR to non-Soviet countries in 1959, i.e. practically all such exports except those to Austria. It is estimated that the vessels to European including Mediterranean destinations have a speed of 12-13 knots and to overseas 13-14 knots, which seems typical for the vessels actually used. The estimated number of round voyages allow for repair time. To the "cargo capacity requirements" must be added about 10% to find the deadweight tonnage of the vessels used.

The table does not allow for Rumanian exports, nor for inter-Bloc trades.

Table 6

Fixtures for Black Sea Loading

	lst January - 9th July, 1960	9th July - 9th December, 1960
Norwegian	51	1
Italian	18	1
British	16	4 + 1
Swedish	9	3
Greek	8	2 + 1
Dan <b>is</b> h	3	2
German	3	-
Netherland	2	e e e e e e e e e e e e e e e e e e e
Yugoslavia	-	3
Icelandic	and the second of the second	1
Unknown	2	2
Sum	112	19 + 1 = 20

(The one contract shown for both British and Greek flag is the Mayroleon arrangement, involving 16 vessels under British and 6 under Greek flag. All others during the later period are for one ship each. For the first period, 3 contracts are involved where more vessels may be used. Two of them are Norwegian, where one ship under each contract might be able to fulfill them; the third is Greek, where 3 or 4 ships seem to be needed continuously).