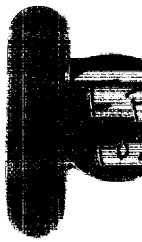

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SOVIET ORBIT'S POSITION IN CERTAIN RAW MATERIALS

IP-102

The attached information is submitted in response to the request dated 7 April 1950.

The list of commodities upon which information is requested has been expanded to include other raw materials which are produced in insufficient quantities in the various areas of the Soviet Orbit. These materials are:

Cotton
Tungsten
Lead
Molybdenum

The study is presented in five sections:

I. Minerals, metals and ferro-alloys:

U.S.S.R.
Satellites
Soviet Orbit Summary

II. Natural Rubber

U.S.S.R.
Satellites

III. Certain agricultural commodities

U.S.S.R.
Satellites

IV. China and Northern Korea

Minerals, metals, rubber and agricultural commodities

V. Soviet Zone, Germany

Minerals, metals, rubber and agricultural commodities

Yugoslavia and Finland are omitted.

I. Minerals, Metals, and Ferro-alloys

A. USSR

Mineral	Degree Essentiality to USSR	Unit	Estimated Production	Estimated Requirements (Rough Approximations)
Mercury	None	76 lb. flasks	15,000	15,000
Tin	Very	Metric tons	9,000	15,000
Cobalt	Essential	" "	250	350
Industrial Diamonds	Critical	Carats	None	80,100,000
Mica-Strategic Grade	None	Metric tons	750	750
Graphite - Flake	None	" "	1,000	1,000
Copper	Very	" "	250,000	325,000
Lead	Very	" "	85,000	110,000

Partial List of Imports to USSR
(In metric tons, unless otherwise noted)

	1946	1947	1948	1949	1950
Mercury-Flasks	1450 (China)			10,000 1/ (Italy)	40,000 2/ (Spain)
Tin	2857 (China) (& UNRRA)	711 (China)	2,000 (China)	1,200 (China) 872 3/ (Belgium)	100 (Belgium)
Cobalt			100 4/ (Belgium)		
Industrial Diamonds in US Dollars			$81,895 (Belgium)	128,070 (Belgium)	
Mica	5/	5/	5/	5/ 6/	5/
Graphite	800 (Ceylon)		925 (Ceylon)		
Copper			3,695 (Belgium)	3,664 (Belgium) 896 (Finland)	850 (Belgium)
Lead			3,000 (Belgium)	5,805 3/ (Belgium) 1,000 (Netherlands)	

1/ Trade Agreement. Only delivery made so far as is known was 2,174 flasks from Societa Italiana Mercurio of Rome sent from Genoa to Odessa on December 4, 1949.

2/ Spain is reported to have sold Global Trading Company of Lichtenstein, 40,000 flasks of mercury at $45 a flask which was understood to be for the USSR. Report of January 5, 1950.

3/ First 6 months (January to June).

4/ Trade Agreement

5/ Not available.

6/ In December 1949, Soviet purchasing agents abroad were told to buy all available strategic grades of mica.

1. Comments on individual commodities

Mercury - In China, the major producers were small Chinese companies, who sold to the National Resources Commission. Exports were sent to USSR in repayment of an old Soviet loan to China.

In Italy, the mines are owned and operated by various mining companies and sales are made by them direct to buyers. In Spain, the mines are owned and operated by the Government.

Tin - Tin in China was mined by the National Resources Commission and individual Chinese miners and sold to the Chinese Government. Tin delivered to USSR was in repayment of a loan from that country. Tin from Hong Kong is mostly of Chinese origin. Both Hong Kong and Macao handle large amounts of smuggled tin which is sold clandestinely to the highest bidder. Tin for Belgium usually comes from the Belgian Congo and is refined there or in Belgium.

Cobalt - The Belgian Congo is the largest producer of cobalt in the world. It is mined, processed and sold by the Union Miniere du Haut Katanga.

Industrial Diamonds - These are produced in the Belgian Congo, South Africa, Brazil, etc. Most are sold to the Diamond Syndicate in London which disposes to private buyers and these sell in the open market. Both Belgium and the Netherlands have been selling to the Soviets and Satellites, under trade agreements and under illicit operations. Moreover, the Soviets have been buying in many countries, mostly in black market transactions. U.K., France, Switzerland and Italy have also participated in the trade.

Mica - strategic grade. While Mica is found in every country, only in a few countries is the strategic grade produced in any large quantity. India produces and processes a large part of world mica, Madagascar and Brazil are other producers. The Soviets have large reserves and produce enough to meet their demands. Any mica they might import would be for stockpiling or of exceptional quality.

Graphite, flake - The USSR has acquired graphite from Ceylon but not in large quantities. They have deposits that will give them enough for their needs. At times there may be a shortage of crucible grade but the fact they do not buy from Madagascar shows it is not an acute shortage.

Copper - Belgium supplies a considerable amount of copper to the USSR, mostly from the mines of the Union Miniere du Haut Katanga, which is sold through many companies. Finland delivers copper to the USSR under reparations and commercial deals. The Soviets seek copper supplies from every possible source.

Lead - Belgium and the Netherlands are large suppliers of lead to the USSR in various forms (new, secondary, alloys, etc.). In recent weeks the French were negotiating with the USSR for delivery of 2,000 tons to the Soviet Union.

In addition to the above commodities, molybdenum and tungsten are considered vital to the Soviet economy. These minerals are dealt with below at some length.

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2. Molybdenum

a. Degree of essentiality

The most essential use of molybdenum is for the manufacture of different types of electronic tubes. For this purpose, there are no substitutes. In the manufacture of structural and tool steels, molybdenum is a very important element but is not indispensable since approximately the same steels can be produced by using other alloying elements. Since molybdenum is one of the scarcest ferro-alloying elements in the USSR, and a very useful element, it it is likely that the USSR is anxious to obtain as much of this element as possible. However, the Soviet steel industry might not be critically affected if large imports are not possible, particularly if the Soviets get all the tungsten they want from China.

b. Normal yearly requirements

Probably about 2,000 tons of concentrates per year.

c. Total yearly imports by USSR since 1946

1946 - unknown - Lend Lease ceased in 1945
1947 - 102 tons
1948 - 132 tons
1949 - approximately 108 tons.

d. Exports from country of origin to USSR for 1948 and 1949

1948 - Norway - 132 tons
1949 - Norway shipped 58 tons.
North Korea - approximately 50 tons
Manchuria - it is possible that the USSR is receiving molybdenum from Manchuria which produced 516 tons of concentrates in 1943 and 1944. No data has been received on possible Manchurian exports to the USSR in 1948 or 1949.

e. Information by commodity

Major producers in country of origin:

Norway - the Knaben mine

North Korea - the North Korean Government

Known shippers from country of origin to USSR:

Norway - Knaben Mining Company

North Korea - North Korean Government

Known consignees in USSR.

Mortrans (from Korea)

Terms and conditions of business

Presumably under barter or trade agreements

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3. Tungsten

a. Degree of essentiality

Although tungsten is vital to the USSR, it is unlikely that at some time in the future it may no longer be ~~it is any longer~~ a critical item since, for all practical purposes, China is now part of the Soviet orbit. An incongruity in the tungsten demand by the USSR is that, with USSR steel production at roughly one fourth US production, Soviet requirements for tungsten are generally estimated to be almost as much as total US consumption. It is difficult to determine Soviet requirements being as high as is claimed.

b. Normal yearly requirements

1949 - 1950 requirements are estimated to be approximately 7,000 tons of 60 percent WO_3. It is difficult to know whether this is "normal" or not, in view of paragraph "a" above. Heavy uses of tungsten occur mainly when production of armor piercing shells is at a high level.

c. Total yearly imports by USSR since 1946:

1946 - at least 4,000 tons of 60 percent WO_3
1947 - at least 3,500 " " " " "
1948 - 6,000 to 7,000 " " " " "
1949 - 1,500 to 2,500 " " " " "

d. Exports from country of origin to USSR for 1948 and 1949

China - 1948 - 5,000 - 6,000 tons of 60 percent WO_3
1949 - Not over 1,000 tons and probably under 500 tons of 60 percent WO_3.

North Korea
1948 - 1,000 tons of 60 percent WO_3
1949 - 1,000 - 1,500 tons of 60 percent WO_3

e. Information by commodity

Majors producers in China:

1. National Resources Commission until November 1949
2. Chinese Communist Government

Major producers in Korea:

1. North Korean Government
   The Kichu Mine
   The Koksan Mine

Shippers from China to USSR

1. Hong Kong
   Wah Chang Trading Company
   Yangtze Supply Corporation
   Kwong Shing Cheong
   Channel Trading Company, Limited
   Marden Development Company
   Luso Enterprises (Portuguese)
   Pan Trading Company
   Spencer and Sons, Limited

2. Shanghai
   Marden Development Company
   Krassons and Company

3. Tientsin
   Daltotal Company
   North China Investment Company
   China Export Trading Company

4. Macao
   Oliviera and Sons

Shippers from Korea to USSR

1. North Korean Government

Known consignees of shippers

1. Eksportkhleb (China)

2. Torgpredstvo (China and Korea)

3. Mortrans (Korea)

Terms and conditions of business in China

1. Barter agreements - or

2. Payment in U.S. dollars - or

3. Repayment of Soviet loan of 1939

Terms and conditions of business in Korea

The ore is purchased by the Soviets and it appears that the payment is purely a bookkeeping transaction. With the money thus obtained, the North Korean Government makes necessary purchases from the USSR.

B. Satellites

1. Metals and minerals

a. Normal Annual Requirements

Metals & Minerals	Albania	Bulgaria	Czecho-slovakia	Hungary	Poland	Rumania
Mercury	very small	very small	60-70 T.	4 T.	very small	5 T.
Tin	none	none	855 T. (consump.) (1939)	600	1300	283 (1939)
Indus. Diamonds	very small	very small	20,000 carats	very small	small	small
Mica	none	none	125 (1942)	"	"	none
Graphite	none	none	1,600	" "	"	1,000
Copper	2,000	2,000	50,000	6,000	10,000	7,000
Lead	none	1,000 (ore)	22,000	small	10,000	3,000

b. Degree of Essentiality

Mercury	insig-nificant	insig-nificant	small	insig-nificant	insig-nificant	insig-nificant
Tin	none	none	very	very	very	essential
Diamonds	insig-nificant	insig-nificant	very	essential	essential	small
Mica	none	none	essential	insig-nificant	"	insig-nificant
Graphite	none	none	"	"	"	"
Copper	Insig-nificant	insig-nificant	critical	essential	very	essential
Lead	"	"	very	"	essential	small

e. Actual Yearly Imports, Metric Tons
(Unless otherwise noted)

Country	Year	Mercury	Tin	Indus. Diamonds	Mica	Graphite	Copper	Lead
Albania	1946	None	None	None	None	None	None	None
	1949							
Bulgaria	1946						176	
	1949				10			
Czechoslovakia	1946	.29 T.	138 T.	930 C.	unknown	unknown	3,917	6,116
	1947	50 T	1,267	77,378 C.	"	"	25,924	19,790
	1948	20 T.	1,328	52,991 C.	"	"	42,520	13,644
	1949		900 (6 mo.)	4,503 C.	"	"	51,000	22,000
Hungary	1946							
	1947	[illegible]	203		2,271		4,929	1,550
	1948		125(6mo.)					
	1949			200.35 C. Belg.				
	1950 (2 mo.)			18.5				
Poland	1946							
	1947		663	3,737 C.				
	1948		2,100	190.75 C.				
	1949		1,615 (6 mo.)					
Rumania	1946					1,100	50	700 (ore)
	1947					1,100		
	1948		180			1,100	6,100	
	1949			392 C. Belg.		1,100		

d. Albania

Metal requirements in Albania are insignificant since Albania is too small industrially to have much need of metals. No imports of the non-ferrous metals listed have been reported. 60 to 65 percent of the annual copper production of approximately 6,000 tons is exported to the USSR. In exchange, the Soviets are reported to send textiles, trucks and to invest in the development of Albanian mines; for 1950 this investment allegedly amounts to 800 million lek. Soviets are in charge of the mining operations at the Rubiku and Puka copper mines, which are the major producers. Exports of copper ore to the Soviet Union in October, November, and December 1949 totalled 5,000 tons compared with 2,700 tons in January 1950.

e. Bulgaria

Bulgarian consumption of metals is small; most of the limited production is exported in the form of ore to the USSR, Germany and Hungary. With the exception of a small shipment of copper, no trade is reported in the other items mentioned.

Import of copper ingots from Turkey in 1946 amounted to 176 tons.

f. Czechoslovakia

Czechoslovakia is seriously short of such raw materials as copper, tin, lead, and industrial diamonds which are vitally essential to the industry and war-making economy of the country.

Mercury

Normal annual imports 7,000 lbs. from UK and Italy. However, domestic production, estimated at 1,500 flasks of 76 lbs. in 1942, is sufficient to cover requirements and could be increased for export. Exported from Yugoslavia in September 1949 - 5 tons; (trade agreement plan 20 tons). Imports from Italy for 1950 planned at 65 tons. Actual imports from Italy in 1947 - 50 tons; 1948 - 20 tons.

Tin

Normal annual requirement is estimated at 3,300 tons of tin. Actual yearly imports are estimated as follows: 1946 - 500 tons; 1947 - 1,267; 1948 - 1,528 and for the first six months of 1949 - 900 tons.

Reported exports by countries to Czechoslovakia in 1948 were:

From Belgium	- 94 Metric tons
From Netherlands	- 1,074
From United Kingdom	- 156
From other countries	- 4

These exports were all allocated to Czechoslovakia by the Combined Tin Committee which ceased functioning in 1949.

Industrial Diamonds

Normal annual requirements of industrial diamonds is estimated at 20,000 carats.

Imports from Belgium and the Netherlands are reported as follows: (in carats)

	1946	1947	1948	1949
From Belgium	930	68,268	1,360	4,508
From Netherlands	-	9,110	51,631	-

Strategic grade mica

Normal annual requirements of mica were reported at 125 metric tons in 1948, most of which was supplied that year by the US and India. Actual annual imports for 1946 - 1949 are not available. The reports on mica exports which have been received have not stated the grade of mica shipped. The following items are extractions from such reports and planned trade agreement shipments.

In 1947, according to trade agreement, Bulgaria was to deliver 20 tons of mica to Czechoslovakia. Trade agreement of 1948 with Rumania granted Czechoslovakia mica valued at 1 million crowns ($19,958). Shipments of mica valued at L25,000 ($100,750) were sent to Czechoslovakia from India in 1949.

Mica is not listed in Czechoslovakia's planned imports for 1950.

Mica (General)

According to the ECA, the satellite countries are now obtaining

all the mica desired from India. The British point out further that satellite countries can obtain all grades of mica from Brazil, Madagascar and some grades from Argentina. In June 1949, the British proposed that license applications for mica to the satellite countries be carefully screened by mica experts for qualtiy and quantity.

Flake graphite

Normal annual imports of graphite are reported at 1,600 tons (mainly from Austria and Germany). The plan for 1949 included imports of 800 tons of graphite.

Production of flake graphite in Czechoslovakia, while of low carbon content (60 percent) is believed to be sufficient for domestic requirements, since no urgent demands for this item have been reported recently and yearly import figures since 1946 are not available. Production figures were reported at 14,000 tons in 1949 and an estimate of 14,200 tons for 1950.

The only sources available to Czechoslovakia for obtaining flake type graphite are Austria and Germany.

Reports of Imports:

From Austria between 1 - 20 September 1948, 50 tons of graphite shipped from Muehldorfer Grafit - Bergbau A.G. near Spitz, Lower Austria to the firm of Tschechc-Slavia in Prague.

Twenty tons of graphite from Muehldorfer Grafit-Berbau, A.G. to an unspecified firm in Bratislava.

According to the trade agreement of July 1949, Austria was to supply 3,000 crowns worth of graphite to Czechoslovakia, grade not reported.

From Germany - The Czechs were negotiating with Conrade of Nurnberg, for 100 tons of graphite early in 1949 but the transaction was not completed because of the export ban in force in Bizone, Germany.

Copper

The shortage of copper in Czech industry is most serious. Normal annual import requirements of copper for the needs of current Czechoslovakian peacetime production, but perhaps not for any special armament program, is believed to be 40,000 to 50,000 tons.

Actual yearly imports of copper from 1946 to 1949 are reported as follows:

1946 - 3,024 tons; 1947 - 22,879 tons; 1948 - 42,520 tons and 1949 estimated at 51,000 tons which was the planned import requirement for that year. (Exports of refined copper from Chile in 1947 totalled 9,066 tons.)

An estimate of copper exports for 1948 and 1949 from country of origin is difficult to make since so much of the imports of copper into Czechoslovakia during those years was illicit and not reported.

Exports from Canada to Czechoslovakia in 1948 amounted to 6,411 short tons (5,816 MT). Under trade agreements for 1948, Czechoslovakia was to receive from Belgium, 6,500 tons of copper; USSR, 4,000 tons; and from Yugoslavia, 5,065 tons.

An import agreement was made with Sovzone Germany by the Czech Smelting Works at Prague between June and November of 1948 for 1,000 tons of copper scrap. The greater part of the copper imports, however, are believed to have been supplied by the West, mainly Belgium, Chile, Mexico and the United Kingdom.

In 1949, planned requirements included 51,000 tons of copper of which 17,000 tons were to have been supplied by Czechoslovakia and EE countries - probably Bulgaria, Hungary, Yugoslavia (early 1949), Germany, Finland and the USSR. The remaining 34,000 tons is estimated to have been supplied by Chile, Belgium, Mexico, Holland and some from Japan and Canada.

Actual reported exports of copper to Czechoslovakia from country of origin in 1948 were:

From Yugoslavia - 5,067 tons
Mexico - 1,406
Belgium - 6,900
Norway - 200

Major producers of copper:

Mexico - Cobre de México; Cananea Consolidated Copper Company
Belgium - Societe Generale des Minerals
Holland - Ertsimport (Transshipment Firm)
Chile - Braden Copper Company; Anaconda Copper Company

Known shippers to Czechoslovakia:

Italian firm - "Anonima Commercio Prodotti Industrali" in Lugano, Italy.
London - Derby and Company
Holland - "Ertsimport", Amsterdam
Switzerland - "Metallbodio", Basel, Switzerland; "Societe Anonyme pour le Exterieur", Zurich; "Globe Trade", Zurich; "Vogdi and Company", Zurich; "Metall Erz A.G."; Dohag Company, Zurich.
Germany - "Metrans", Schaffenburg
USA - European Metal Corporation, New York.

Lead

Normal yearly requirements are estimated at approximately 30,000 tons. Average imports of lead before the war (1935-1937) amounted to 11,828 tons.

Lead is one of the critical shortages in Czech industry and one of the most difficult items to procure. The shortage of lead was the cause of restricted production at several factories during 1949. 1948 imports of lead reportedly amounted to 15,844 tons coming mainly from Germany, Yugoslavia, Belgium, Austrialia, Spain, and Poland. Planned import requirements for 1949 included 22,000 tons of lead to be imported mainly from Yugoslavia, Poland, Rumania and the USSR.

Imports of lead:

1946 - 6,038 metric tons
1947 - 19,586
1948 - 15,844
1949 - 22,000

Trade agreements show planned exports of lead by countries:

From Bulgaria	-	100 tons (1949)
From Mexico	-	lead in various forms - amount not stated (1949-1954)
From USSR	-	"large quantities" (1950)
From USSR	-	4,000 tons (1949-1951)
Rumania	-	2,000 tons (1949)
Yugoslavia	-	8,400 tons (1948)
Belgium	-	6,700 tons 1949 (before the break)
	-	1,000 tons (1948)

Actual shipments are reported:

From Yugoslavia	-	In 1948 8,455 tons lead
From USSR	-	January to September 1948 - 1,463 tons
From USSR	-	First quarter of 1949 - 650 tons

g. Hungary

Mercury

The annual supply position requires 9,000 pounds of mercury imports per year. Source unknown. Mercury was listed in the 1949 trade agreement with Italy but amount not stated.

Tin

Requirements 50 tons a month.

Consumption 600 tons annually. All imported from the UK and Netherlands.

Allocated by the Combined Tin Committee 1947 - 203 tons.

July - December 1948 - 125 tons.

Industrial diamonds

No information is available on imports in 1946-1948. Exports from Belgium in 1949 amounted to 7,117 carats.

Mica

The barter agreement with Norway which ended in 1939 included some mica. The amount and the grade were not given. Exports from the US in 1947 amounted to 2,271 tons.

Graphite

From Austria by agreement in 1949 - 1,000 tons (grade not given), and in 1950 - 1,600 tons of which 300 tons have been shipped.

Copper

Hungarian industry needs 500 tons of electrolytic copper per month. Imports of copper in 1947 amounted to 4,929 tons and included from

[redacted]

Turkey	1947	100 tons
USSR	1947	502
Yugoslavia	1947	2,163

Information on shipments for 1948, 1949 have only been reported in small dribbles. Unstated amounts of copper and copper products imports were planned in trade agreements for 1949 with Italy, Switzerland and Sweden.

Lead

Lead imports in 1947 amounted to 1,550 tons.

Exports to Hungary:

From USSR	2,000 tons	1949 Agreement
From Belgium	127 tons	in February 1950
From Australia	3 tons	supplied by Derby & Company, London,
	98 tons	supplied by Derby & Co., London
	24 tons	" " " " " "

h. Poland

Mercury

Three-year trade agreement with Italy 1949-1952 - Italy to export 60 tons mercury.

Tin

The Combined Tin Committee allocated 673.6 metric tons in 1947; Poland 2,100 metric tons of tin in 1948. 203 tons of refined tin were shipped to Poland handled in Antwerp by Van Ommeren (Anvers) S.A. forwarding agents; origin unknown, and 1,615 metric tons during first half of 1949. Trade agreement with Indonesia for 1950 includes tin. Amount not stated.

Industrial Diamonds

No information on imports in 1946 and 1949.

Exports from Belgium in 1947 - 2,933 carats; 1948 - 191 carats.
From the Netherlands in 1947 - 784 "

Mica

Trade agreement for 1949 with Austria shows plans for Austria to supply Poland with mica valued at $10,000. Grade not given.

Graphite

From a Soviet controlled firm in Vienna 170 tons graphite. (Muhlberg Grafit Works) November - December 1948.

A report of a synthetic graphite factory at Ratibos was made in February 1949, stating that the factory processes 50 railroad cars of raw material daily and ships only graphite powder to the USSR. The raw material reportedly comes from USSR/Germany.

Trade Agreement Czechoslovakia to deliver 1,000 tons graphite in 1950
" " France to deliver 150 tons in 1949
" " Norway " " 150 " " "

Copper

Annual copper imports during 1946-1949 not available. Exports of copper to Poland which have been reported are shown as follows:

From Finland	1949	3,000	tons refined copper
From Chile	1949	6,556	tons of which
		3,556	tons were reported shipped by the Braden Copper Co.
From Japan	1949	8,000	tons
From Albania	1948		Amount not stated
From Yugoslavia - Planned for 1949 - 2,000 tons			
From Albania	1949		Amount not stated
From Belgium	1950 agreement	1,500	tons
From Bulgaria	1949		Amount not given.

Lead

From Argentina - lead listed on trade agreement. Amount not stated. From Yugoslavia planned 1949 - 2,000 tons.

i. Rumania

Mercury

About 1,500 pounds of mercury is produced annually from complex gold-silver-mercury ores. The only reported export to Rumania was 26 tons of mercury purchased from Scheller, an export and import agency in Zurich, in August 1949. The supplier was Universal Mexicana, Vera Cruz.

Tin

Allocation by Combined Tin Committee 1948 - 180 tons. July - December 1949 - From USSR - 9 tons.

Industrial Diamonds

No information on imports of diamonds in 1946, 1947 or 1948. Exports of 392 carats from Belgium were reported in 1949.

Mica - None

Graphite

Requirements small. Domestic plant capacity 4 tons.
Imports, Annual - 1,100 tons
Exports by country - From USSR - 1949 - 28 tons.

Copper

Copper exports in metric tons (actual and planned) from:

	1946	1947	1948	1949
Turkey	127	24	-	-
Belgium	-	-	5,000	-
USSR	-	-	330 (10 mos.)	7,000 (trade agreement) (tr. agree.) 5,800 (actual)

	1946	1947	1948	1949
Sweden	-	-	-	5,000
Rotterdam	-	-	550 (1 month)	-

Lead

Requirements about 3,000 tons - sufficient

Imports	1946	1947	1948	1949
Lead	700 T. (ore)	-	-	-

Exports by country;

USSR - July and August 1949 - 11,763 (65 percent of Polish origin)

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2. Ferro-Alloys

a. Estimate of Degree of Essentiality.

Country	Cobalt	Tungsten	Molybdenum
Albania	None	None	None
Bulgaria	None	None	None
Czechoslovakia	Critical	Critical	Critical
Hungary	Critical	Critical	Critical
Poland	Critical	Critical	Critical
Rumania	Essential	Essential	None

b. Estimate of Normal Yearly Requirements of Satellites

Country	Cobalt	Tungsten	Molybdenum
Albania	None	None	None
Bulgaria	None	None	None
Czechoslovakia 1/	5 mts.	45 mts W. metal 70 mts W. (30%) 380 mts Fe. W.	40 mts Mo. metal 178 mts Fe. Mo.
Hungary 2/	7.5 mts	110 mts Fe. W.	60 mts. Fe. Mo.
Poland	Unknown	Unknown	Unknown
Rumania	Insignificant	Insignificant	Insignificant

Sources: 1/ Praha State Airgram 783, 7/11/49; 787 8/11/49. Czech Planned Imports of Raw Materials for 1950

2/ Based on MA Budapest R-391, 15 June 48; R-440, 27 Aug 48; R 617, 13 Dec 48 and [redacted] 14490, 8 March 50. These reports gave consumption figures for February, April, June, October, 1948 and a 1948 monthly average consumption figure. However, the former Director of Raw Material Procurement of the Ministry of Foreign Trade, R-2 source reported (Vienna State Dsmp. 555, 1 Dec 49, OMI, USFA R 516., 24 Oct 49, and USFA Sp. BiWeekly 798, 22 July 49) that Hungary's requirements to produce 40,000 metric tons of electric steel were:

Ferro-Tungsten	360 metric tons
Ferro-Molybdenum	60 " "
Cobalt	50 " "

c. Estimate of Yearly Imports of Satellites.

Country	Year	Cobalt	Tungsten	Molybdenum
Albania		None	None	None
Bulgaria		None	None	None
Czechoslovakia	1946	3 mts	20 mts W. metal 200 mts Fe. W.	20 mts Mo. metal 100 mts Fe. Mo.
	1947	4 mts	40 mts W. metal 300 mts Fe. W.	30 mts Mo. metal 150 mts Fe. Mo.
	1948	5 mts	45 mts W. metal 380 mts Fe. W.	40 mts Mo. metal 178 mts. Fe. Mo.
	1949	5 mts	45 mts W. metal 380 mts Fe. W.	40 mts Mo. metal 178 mts Fe. Mo.
Hungary	1946	5 mts	50 mts Fe. W.	30 mts Fe. Mo.
	1947	7.75 mts	69 mts Fe. W.	22.36 mts Fe. Mo.
	1948	7.5 mts	110 mts Fe. W.	60 mts Fe. Mo.
	1949	7.5 mts	110 mts Fe. W.	60 mts Fe. Mo.
Poland	1946	No information	450 mts W. concentrates	No information
	1947	"	No information	" "
	1948	"	" "	" "
	1949	"	" "	" "

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Country	Year	Cobalt	Tungsten	Molybdenum
Rumania	1946	Insignificant	Insignificant	None
	1947	" "	" "	"
	1948	" "	" "	"
	1949	" "	" "	"

d. Estimate of Exports from Country of Origin to Satellites 1948 and 1949.

1. Austria:

a. To Czechoslovakia

Tungsten and Molybdenum. The Austro-Czech trade agreement, signed 16 July 1949, and valid until 30 June 1950 (a prolongation of the 1948-1949 agreement) includes: Molybdenum and tungsten wire - 5 million Czech krs. (Vienna State Desp. 390, 25 Aug 1949).

b. To Hungary

Tungsten and Molybdenum. In the Hungarian-Austrian trade agreement signed 22 Feb 1949, Austria was to send $210,000 of molybdenum, wolfram and hard metal products, including molybdenum wire. Early in March 1950, an Hungarian trade delegation went to Vienna to discuss a new agreement. Hungary desired to raise the amount to $300,000, but as yet there has been no report of the result of the negotiations. (Vienna TOSEA R-3, 23 March 1950).

2. Belgium:

a. To Czechoslovakia

Cobalt. An unverified report stated that in 1948 Czechoslovakia obtained cobalt through Switzerland and Belgium and that attempts to obtain a supply in 1949 were unsuccessful. (Bern State Desp. 439, 12 Oct 1949).

Tungsten. MA Belgium R 472, 9 Nov 1949, gives an account of the commercial activities of Liebermann, Director of Centralimpex (Czech) and Alimabel of Brussels. Liebermann recently has obtained 10 metric tons of wolfram from the U.S., which was recently shipped to Czechoslovakia.

b. To Hungary

Cobalt. 1,000 kgs. of cobalt metal were shipped by mail from Continental Lines, Celem, Belgium to Diosgyor, Hungary through Schirnding, Germany on 16 Oct 1949 (WIGOG Airgram 644, 30 Nov 1949, from German Customs Officials).

c. To Poland

Tungsten. See "Information by Commodities".

Molybdenum. See "Information by Commodities".

3. Bolivia:

a. To Czechoslovakia

Tungsten. The Czechs are negotiating a trade agreement . . . Banco Minero offers Czechoslovakia wolfram at prices current in the U.S. markets. (La Paz State Airgram 424, 3 Oct 1949).

4. China:

a. To Poland

Tungsten. In late March 1950, a Polish trade delegation, Ministry of Foreign Trade, returned from a two months visit to China. As a result, a number of purchase and sales contracts have been concluded on the behalf of individual foreign trade organizations which allowed Poland to purchase wolfram and concentrates. (FBIS L R-28, 27 March 1950).

5. France

a. To Poland

Molybdenum. A trade agreement between France and Poland, valid 1 Sept 1947 and 31 Aug 1948, provided for 75 metric tons of ferro-molybdenum (I.F.S. Information Notes No. 25, 20 May 1948).

6. Germany, Soviet Zone of

a. To Czechoslovakia

Tungsten and Molybdenum. The Soviet Zone of Germany shipped, between January and March 1949, 100 metric tons of ferro-tungsten, ferro-molybdenum, ferro-chrome and ferro-vanadium. (SO 25889, 15 July 1949, documentary).

7. Netherlands

a. To Czechoslovakia

Cobalt. An unverified report stated that the maintenance of a regular supply of cobalt in Czechoslovakia is very difficult and that recently, some had been acquired in the Netherlands. (OO B 10264, 23 Nov 1949).

b. To Poland

Tungsten and Molybdenum. On 20 Dec 1944, the SS WARNIA (Polish flag) left Rotterdam for Gdynia with 303 kgs. of wolfram wire and 116 kgs. of molybdenum wire. (SO DB 21596/a; 28 Feb 1950).

8. Sweden

a. To Czechoslovakia

Tungsten. The Swedish-Czech trade agreement, valid 1 Feb 1949 through 31 Jan 1950, included the provision that Sweden was to ship 6 million Swedish kr. of ferro-alloys (Stockholm State Desp. 68, 16 March 1949). The agreement covering the period 1 Feb 1950 through 31 Jan 1951 carried a similar item, but the quantities will be reduced because prices are now higher (Praha State cable 484, 4 April 1950). Ferro-tungsten was undoubtedly among the ferro-alloys, as evidenced by shipments reported in "Information by Commodities".

b. To Hungary

Tungsten. The Swedish-Hungarian trade agreement, valid 1 Oct 1948 through 30 Sept 1949, included 20 metric tons of Ferro-tungsten. (MA Budapest R 888, 1 Dec 1948; Stockholm State Desp. 843, 18 Nov 1948).

Another source, the former Director of Raw Material Procurement in the Hungarian Ministry of Foreign Trade (USFA Special Bi-Weekly No. 96, 22 July 1949) said that of 260 metric tons of ferro-tungsten needed by Hungary in 1948, Sweden agreed to ship 60 metric tons.

c. To Poland

Tungsten. Swedish export commitments on IA items for 1949 included 210 metric tons of ferro-tungsten.

9. Switzerland

a. To Czechoslovakia

Cobalt. An unverified report stated that in 1948 Czechoslovakia obtained cobalt through Switzerland and Belgium and that attempts to obtain a supply for 1949 were unsuccessful (Bern State Desp. 429, 12 Oct 1949).

b. To Hungary

Molybdenum. The Hungarian-Swiss trade agreement, valid 1 Oct 1948 through 30 Sept 1949, provided for shipments of 250,000 Swiss francs of

molybdenum and other wire for lamps. (MA Budapest R 585, 1 Dec 1948).

10. United Kingdom:

a. To Finland

Tungsten. In the agreed minutes of Finnish-British trade negotiations, the Finns requested 3 metric tons of ferro-tungsten (Helsinki State Desp. 73, 6 April 1949). Information on only one shipment is available, which amounted to 10 kgs. 100 grs. in August 1949.

b. To Poland

Tungsten. The 1949 protocol to the Five Year Trade and Finances Agreement included 10 long tons of ferro-tungsten for 1949. (London State Desp. 1706, 24 Dec 1948).

11. The U.S.S.R.:

a. To Hungary

Tungsten. The Soviet-Hungarian trade agreement, valid 6 Jan 1947 through 31 July 1948, provided for the shipment of 250,000 metric tons of wolfram, manganese and chrome. The amount of wolfram is not known.

Reports on the Soviet-Hungarian trade agreement, valid 1 Aug 1948 through 31 Dec 1949, differ in the amounts of ferro-tungsten to be supplied to Hungary. SO 23855, 13 May 1949 reports 200 metric tons. State Dept. Report 935, 15 Nov 1949 carries 180 metric tons. USFA Special Bi-Weekly No. 98, 22 July 1948 (source of which was the former Director of Raw Materials Procurement, Hungarian Ministry of Foreign Trade) stated the agreement was for 300 metric tons.

Molybdenum. Sources report different amounts of ferro-molybdenum included in the Hungarian-Soviet trade agreement, valid 1 Aug 1948 through 31 Dec 1949. One source reported 20 metric tons (SO 23855, 13 May 1949) and another 8 metric tons to be delivered between 1 Aug 1948 and 31 March 1949, and another 20 metric tons to be delivered by 31 December 1949 (Budapest State Desp. 938, 15 November 1948). The former Director of Raw Materials Procurement, Hungarian Ministry of Foreign Trade (USFA Special Bi-Weekly No. 98, 22 July 1949) claimed 60 metric tons of ferro-molybdenum were secured by a contract signed with "Promisirivimport" of Moscow.

b. To Poland

Cobalt. It is believed that cobalt needed in the Polish iron and steel industry is being acquired either on the World Market at premium prices or from the USSR.

Tungsten and Molybdenum. The Polish Newspaper, Kosmopolita, 8 Aug 1947 stated that the Polish-Soviet trade agreement, valid 1 July 1947 through 30 June 1948, included 150 metric tons of ferro-tungsten and 50 metric tons of ferro-molybdenum. See also "Information by Commodity".

c. To Rumania

Cobalt. The small amount of cobalt needed by the Rumanian iron and steel industry is supplied by the USSR. (JANA, Rumania R 269, 15 Feb 1949; Bucharest State Desp. 445, 11 Nov 1949.)

Tungsten. Ferro-tungsten requirements are supplied by the USSR. (JANA Rumania R 269, 15 Feb 1949; Bucharest State Desp. 445, 11 Nov 1949).

e. Information by Commodity.

1. Cobalt
   a. Albania - none.
   b. Bulgaria - none.
   c. Czechoslovakia - There is no firm information available on the source of cobalt for the Czech iron and steel industry. One source (S.O. 27774, 22 Sept

1949) reported that Czechoslovakia is able to cover demands in the World Market against payment in hard currency. Another (Bern State Desp. 439, 13 Oct 1949) understood that in 1948 Czechoslovakia obtained cobalt through Switzerland and Belgium and that attempts were made to obtain a supply for 1949, but were unsuccessful. Still another source (OO E 10264, 23 Nov 1949) stated that the maintenance of a regular supply of cobalt in Czechoslovakia is very difficult and that recently some had been acquired in the Netherlands.

d. Hungary.

1. From Belgium:

1,000 kgs. of cobalt metal were shipped by rail from Continental Mines, Colen, Belgium to Diosgyor, Hungary through Schirnding, Germany, on Oct 16, 1949. (HICOG Airgram 644, 30 Nov 1949 from German Customs Officials).

e. Poland

There is no information available on Polish sources of cobalt. The cobalt needed in the iron and steel industry is either being acquired on the world market at premium prices or is being supplied by the USSR.

f. Rumania

The small amount of cobalt needed by the Rumanian steel industry is supplied by the USSR. (JANA Rumania R 269, 15 Feb 1949; Bucharest State Desp. 445, 11 Nov 1949).

2. Tungsten
a. Albania - none.
b. Bulgaria - none.
c. Czechoslovakia.

1. From Austria:

The Austro-Czech trade agreement, signed 15 July 1949, and valid until 30 June 1950 (a prolongation of the 1948-49 agreement) includes: Molybdenum and tungsten wire to be exported by Austria to Czechoslovakia - 5 million Czech kcs. (Vienna State Desp. 299, 25 Aug 1949.)

Actual shipments were reported (Vienna R 4553, 7 March 50):

	1 Oct 48 through 30 Sept 49	1 Oct 49 through 31 Dec 49
Molybdenum (100% for wire)	628 kgs.	37 kgs.
Tungsten (100% for X-ray)	363	331
Tungsten (70% plus copper for electric contact electrodes)	1,507	213
Tungsten (60-70% for carbide tools)	5	0

2. From Belgium:

M.A. Belgium R 478, 9 Nov 1948 gives an account of the commercial activities of Liebermann, Director of Centrolimpex (Czech) and Attaché of Brussels. Lieberman has recently obtained 10 metric tons of wolfram from the U.S., which were shipped to Czechoslovakia.

3. From Bolivia:

The Czechs are negotiating a trade agreement . . . Banco Minero offers Czechoslovakia wolfram at prices current in U.S. markets. (La Paz State Airgram 424, 3 Oct 1949).

4. Germany, Soviet Zone of (From)

The Soviet Zone of Germany shipped, between January and March 1949, 100 metric tons of ferro-tungsten, ferro-molybdenum, ferro-chrome and ferro-vanadium. (DO 28589, 15 July 49, documentary).

5. From Sweden:

The Swedish-Czech trade agreement, valid 1 Feb 49 through 31 Jan 50, included the provision that Sweden was to ship 6 million Swedish kr. of ferro-alloys (Stockholm State Desp. 68, 16 March 49). The agreement covering the period 1 Feb 50 through 31 Jan 51 carried a similar item, but the quantities will be reduced because prices are now higher (Prague State Cable 494, 4 April 50). Ferro-tungsten was undoubtedly among the ferro-alloys, as evidenced by the following:

10,000 kilos of ferro-tungsten were shipped by rail from Elektrokemisk, Gullaspang, Sweden to Foldina Hut, Kladno, Czechoslovakia. On 26 Oct 49, the shipment passed through Schirnding.

30,435 kilos of wolfram iron were shipped by rail from Jarlly Company, Fodberg, Sweden to Foldina Hut, Kladno, Czechoslovakia. On 3 Nov 49 the shipment passed through Schirnding. (WIOOO Airgram 644, 30 Nov 49. Source - German Customs Officials).

	1948	Jan-June 1949	July-Dec 1949
Other ferro-alloys	35,910 kgs.	54,500 kgs.	230,200 kgs.

(Helsinki State Desp. 80, 13 May 49; 116, 20 Oct 49; and 100, 10 Feb 50).

4. Hungary

1. From Austria:

In a Hungarian-Austrian trade agreement, signed 22 Feb 49, Austria was to send to Hungary $210,000 of molybdenum, wolfram and hard metal products, including molybdenum wire. Early in March 1950, an Hungarian trade delegation went to Vienna to discuss a new agreement. Hungary desired to raise the above item to $300,000, but there has been no report of the result of the negotiations as yet. (Vienna TOSCA R-3, 28 March 1950).

Vienna P 4863, 7 March 50 reported on deliveries of the Austrian firm Metallwerk Plansee:

	Oct.'48 - Sept.'49	Oct.'49 - Dec.'49
Molybdenum (100% for wire)	3,929 kgs.	1,065 kgs.
Tungsten (70% plus copper for electrodes)	49	0
Tungsten (60-70% for carbide tools)	16	399

2. From Sweden:

The Swedish-Hungarian trade agreement, valid 1 Oct 1948 through 30 Sept 1949 included 20 metric tons of ferro-tungsten to be shipped from Sweden to Hungary (MA Budapest R 586, 1 Dec 1948 and Stockholm State Desp. 545, 18 Nov 1948).

The former Director of Raw Material Procurement in the Hungarian Ministry of Foreign Trade (USFA Special Bi-Weekly No. 98, 22 July 1949) said that of the 350 metric tons of ferro-tungsten needed by Hungary in 1949, Sweden agreed to ship 60 metric tons. Two Swedish firms "Bergsprodukter" and "Ferrolegeringar" were to be the suppliers. The former firm required the entire payment to be in U.S. dollars, but the other accepted 25% of the invoice sum in Swedish crowns.

3. From the USSR:

The Soviet-Hungarian trade agreement, valid 6 Jan 1947 through 31 July 1948, provided that the USSR would furnish to Hungary 250,000 metric tons of wolfram (tungsten) manganese and chrome. The amount of wolfram is not known.

Reports on the Soviet-Hungarian trade agreement, valid 1 Aug 1948 through 31 Dec 1949, differ in the amounts of ferro-tungsten to be sent from the Soviet Union to Hungary. SO 23855, 13 May 1949 reports 280 metric tons. State Dept. report 925, 15 Nov 1949 states the amount to be 180 metric tons. USFA

Special Bi-Weekly No. 96, 22 July 1949 (source of which was the former Director of Raw Material Procurement, Ministry of Foreign Trade) stated the agreement was for 300 metric tons and that by March 1949, 60 metric tons had been delivered.

e. Poland

1. From Belgium:

The following shipments have been reported from various sources:

Ship	Date	From	To	Amount Wolfram	Remarks
SS PUCK (Pol.)	5/11/49	Antwerp	Gdynia	41,000 kgs.	Handled by Transport Internationaux, S.A., Antwerp.
" " (Pol.)	21/11/49	"	"	73,500 kgs. Net.	Handled by Somarm, Antwerp.
" " (Pol.)	13/12/49	"	"	51,000 kgs.	Handled by Transport Internationaux S.A., Antwerp.

Note: Somarm is Societe Maritime Anversoise, of 8 Courte Rue Claires, Antwerp.

(DO 31299, 9 Nov 1949; DO 32898, 22 Nov 1949; and DO 32604, 27 Dec 1949).

In answer to a query regarding shipments, the Embassy in Antwerp reported that the 5 Nov 1949 shipment of wolfram was made to PSAL (Polish Shipping Agency, Ltd., for centralized trading agencies in Poland by Societe Anonyme de Transports Internationaux of Antwerp. Shipments were f.o.b. Antwerp. Also, the wolfram was handled by J. Nieberding & Fils, in Antwerp, the forwarding agents for the account of Metallurg, Incorp. of 25 Broad Street, New York, which had the wolfram shipped from Hong Kong and ordered it delivered to PSAL. (Antwerp State Airgram 11, 17 Jan 1950).

2. With China:

In late March 1950, a Polish trade delegation, under the Polish Ministry of Foreign Trade returned to Poland after spending two months in China. As a result of talks, a number of purchase and sales contracts have been concluded on the behalf of individual foreign trade organizations which allowed Poland to purchase wolfram and concentrates in China. (FBIS I R-28, 27 March 1950).

3. With the Netherlands:

On 20 December 1949, the SS WARMIA (Polish flag) left Rotterdam for Gdynia and carried 303 kgs. of wolfram wire. (DO IM 21596/a, 28 Feb 1950).

4. With Sweden:

Swedish export commitments on IA items for 1949 included 210 metric tons of ferro-tungsten.

5. With United Kingdom:

The Five Year Trade and Finance Agreement between the UK and Poland, signed 14 Jan 1950 included: "The government of the UK shall place no obstacle in the way of the Polish government obtaining in the year 1949, through appropriate trade channels reasonable commercial quantities of ferro-tungsten . . .". 10 long tons of ferro-tungsten was the amount agreed upon for 1949 (London State Desp. 1766, 24 Dec 1948).

6. With USSR:

It is believed that the Soviet Union is supplying Poland with ferro-tungsten, but the only firm basis is an article which appeared in the Polish newspaper, Kosmopolita, of 8 Aug 1947. This press notice stated that under the terms of the Polish-USSR trade agreement, valid 1 July 1947 through 30 June 1948, the USSR was to send 150 metric tons of ferro-tungsten.

f. Rumania

Ferro-tungsten requirements for the Rumanian iron and steel industry are satisfied by imports from the USSR (JAMA Rumania R 269, 15 Feb 1949; Bucharest State Dcsp. 445, 11 Nov 1949).

An unverified shipment of tungsten, however, was reported from two sources in August 1949, which stated that either 300 or 3,000 metric tons were sent to Rumania via Trieste. The tungsten was purchased from M. J. Newbry, Ltd., London, dealers in raw materials. Shipping was handled by Sommer, a manager of Societe Generale de Surveillance in Geneva. An attempt to check this shipment was made by CIA and a reply was received from London (MCA London TOREP A 106 to Amemb., Paris) which stated that no license had been issued in London for shipment to Switzerland and that no such transaction had taken place. MCA London offered an explanation, unsupported by evidence, that the tungsten might have been resold by means of a transshipment in such a way that the tungsten consignment never fell under UK control. No further information is available.

3. Molybdenum
   a. Albania - none.
   b. Bulgaria - none.
   c. Czechoslovakia.
      See paragraph 2c (1) and 2e (4) above.
   d. Hungary
      1. From Austria: see paragraph 2e (1), above.
      2. From Switzerland:

The Hungarian-Swiss trade agreement, valid 1 Oct 1948 through 30 Sept 1949, provided that Switzerland ship to Hungary, molybdenum and other wire for lamps, valued at 250,000 Swiss francs. (MA Budapest R 586, 1 Dec 1948).

3. From USSR:

Reports differ on the amount of ferro-molybdenum included in the Soviet-Hungarian trade agreement covering the period 1 Aug 1949 through 31 Dec 1949. One report states the total amount to be 20 metric tons (SO 32855, 13 May 1949) and another (Budapest State Depp. 985, 15 Nov 1949) includes 8 metric tons to be delivered between 1 Aug 1948 and 31 March 1949, with 30 metric tons to be delivered by 31 December 1949. The former Director of Raw Materials Procurement in the Hungarian Ministry of Foreign Trade (USFA Special Bi-Weekly No. 96, 22 July 1949) claimed 60 metric tons of ferro-molybdenum was secured by a contract signed with "Fremisirivimport".

e. Poland

1. With Belgium

The following molybdenum shipments have been reported from various sources:

Ship	Date	From	To	Amount Fe-Molybdenum	Remarks
SS WARMIA (Pol.)	10/8/49	Antwerp (?)	Gdynia	47,804 kgs.	
" " (Pol.)	4/11/49	"	"	73,000 kgs.	Handled by Transport Internationaux S.A., Antwerp.
SS PUCK (Pol.)	13/12/49	"	"	9,000 kgs.	" " "

(MA, Belgium R 417, 30 Aug 49; SO 31299, 9 Nov 1949; SO 32604, 27 Dec 49).

The shipment of ferro-molybdenum on 10 Aug 1949 was reliably reported to have been owned by Balkimex of Zurich, Switzerland, who bought it in the Far East. (Antwerp State Airgram 20, 20 Jan 1950).

2. From the Netherlands:

The Polish ship, SS WARMIA, left Rotterdam for Gdynia on 20 December 1949 and carried 115 kgs. of molybdenum wire. (SO [redacted] 21896, 28 Feb 50).

[redacted]

3. From France:

A trade agreement between France and Poland, valid 1 Sept 1947 and 31 Aug 1949 provided that France send Poland 75 metric tons of ferro-molybdenum. (I.F.I. Information Notes No. 25, 20 May 1948).

4. From USSR:

Rzeczpospolita, 8 Aug 1947, Polish press, reported that the 1 July 1947 through 30 June 1948 Polish-Russian trade agreement provided for the import of 50 metric tons of ferro-molybdenum.

5. Rumania:

Some molybdenum is mined in Rumania which is believed sufficient for requirements.

C. Orbit Summary

Mercury - In flasks of 76 lbs. mercury each

Country	Degree Essentiality	Estimated Requirements	Imports (Partial List) 1946	1947	1948	1949	1950
U.S.S.R.	None	15,000	1450	-	-	10,000	40,000
Albania	Insignificant	Very small	None	None	None	None	None
Bulgaria	"	" "	-	-	-	-	-
Czechoslovakia	Small	1,740-2,031	8	1160	580	-	-
Hungary	Insignificant	116	-	-	-	-	-
Poland	"	Very small	-	-	-	-	-
Rumania	"	145	-	-	-	-	-

Tin - In metric tons

USSR	Very	15,000	2857	711	2000	2079	100
Albania	None	None	-	-	-	-	-
Bulgaria	"	"	-	-	-	-	-
Czechoslovakia	Very	853	138	1267	1328	900	-
Hungary	Very	600	-	203	125	-	-
Poland	Very	1300	-	663	2100	1615	-
Rumania	Essential	283	-	-	180	-	-

Cobalt - In metric tons

USSR	Essential	350	-	-	100	-	-
Albania	None	None	None	None	None	None	-
Bulgaria	"	"	"	"	"	"	-
Czechoslovakia	Critical	5	3	4	5	5	-
Hungary	Critical	7½	5	7 3/4	7½	7½	-
Poland	"	-	-	-	-	-	-
Rumania	Essential	Insignificant	Insignificant	Insig.	Insig.	Insig.	Insig.

Industrial Diamonds (In carats or value in US dollars)

USSR	Critical	50-100,000	-	-	$81,895	$128,070	-
Albania	Insignificant	Very small	None	None	None	None	-
Bulgaria	"	" "	-	-	-	-	-
Czechoslovakia	Very	20,000	930	77,378	52,991	4508	-
Hungary	Essential	Very small	-	-	-	200	18
Poland	Essential	Small	-	3737	191	-	-
Rumania	Small	"	-	-	-	392	-

Mica - Strategic grade (In metric tons)

USSR	None	750	-	-	-	-	-
Albania	"	None	None	None	None	None	-
Bulgaria	"	"	-	-	-	10	-
Czechoslovakia	Essential	125	-	-	-	-	-
Hungary	Insignificant	Very small	-	2271	-	-	-
Poland	Essential	Small	-	-	-	-	-
Rumania	Insignificant	None	-	-	-	-	-

Graphite - Flake (In metric tons)

Country	Degree Essentiality	Estimated Requirements	Imports (Partial List) 1946	1947	1948	1949	1950
USSR.	None	1000	800	-	925	-	-
Albania	"	None	None	-	-	-	-
Bulgaria	"	"	-	-	-	-	-
Czechoslovakia	Essential	1600	-	-	-	-	-
Hungary	Insig-nificant	Small	-	-	-	-	-
Poland	Essential	"	-	-	-	-	-
Rumania	Insig-nificant	1000	1,100	1,100	1,100	1,100	-

Tungsten (60% WO_3 in metric tons)

USSR	Essential	7000	4000	3500	6-7000	1500-2500	-
Albania	None	None	None	None	None	None	None
Bulgaria	"	"	"	"	"	"	"
Czechoslovakia	Critical	45-Metal 70-30% concentrates 380-Ferro-W.	20-Metal 200-Ferro-W.	40-Metal 300-Ferro-W.	45-Metal 380-Ferro-W.	45-Metal 380-Ferro-W.	-
Hungary	Critical	110 Ferro-W.	50-Ferro-W.	59-Ferro-W.	110-Ferro-W.	110-Ferro-W.	-
Poland	"	-	450	-	-	-	-
Rumania	Essential	Insig-nificant	Insig.	Insig.	Insig.	Insig.	-

Molybdenum (In metric tons)

USSR	Critical	2000	-	102	132	108	-
Albania	None	None	None	None	None	None	-
Bulgaria	"	"	"	"	"	"	-
Czechoslovakia	Critical	40 Metal 178 Ferro-Mo.	20-Metal 100-Ferro-Mo.	30-Metal 150-Ferro-Mo.	40-Metal 178-Ferro-Mo.	40-Metal 178-Ferro-Mo.	-
Hungary	Critical	60 Ferro-Mo.	20-Ferro-Mo.	22-Ferro-Mo.	60-Ferro-Mo.	60-Ferro-Mo.	-
Poland	"	-	-	-	-	-	-
Rumania	None	Insig-nificant	None	None	None	None	-

Copper (In metric tons)

USSR	Very	325,000	-	-	3695	4560	850
Albania	Insig-nificant	2,000	None	-	-	-	-
Bulgaria	"	2,000	176	-	-	-	-
Czechoslovakia	Critical	50,000	3917	25,924	43,520	51,000	-
Hungary	Essential	6,000	-	4,929	-	-	-
Poland	Very	10,000	-	-	-	-	-
Rumania	Essential	7,000	50	-	6,100	-	-

Lead (In metric tons)

Country	Degree Essentiality	Estimated Requirements	Imports (Partial List) 1946	1947	1948	1949	1950
USSR	Very	110,000	-	-	3,000	4,805	-
Albania	Insignificant	None	None	-	-	-	-
Bulgaria	"	1,000	-	-	-	-	-
Czechoslovakia	Very	22,000	6,116	19,790	13,844	23,000	-
Hungary	Essential	Small	-	1,550	-	-	-
Poland	"	10,000	-	-	-	-	-
Rumania	Small	3,000	700	-	-	-	-

II. Natural Rubber

1. Degree of Essentiality to USSR and Satellites

Except for the USSR, Czechoslovakia, and possibly the Soviet Zone of Germany, most of the Soviet bloc countries have small rubber fabricating industries and use on the average not more than 5,000 tons each of natural rubber per annum. In case of war, this fabricating capacity would contribute to the over-all effort but in themselves constitute a very small part.

Breakdown of fabricating capacity, hence rubber requirements according to countries is given below:

Albania	- insignificant	Poland	- of growing importance
Austria	- of growing importance	Rumania	- small
Bulgaria	- negligible	USSR *	- vital to war economy
Czechoslovakia	- very important		
Hungary	- small		

* Large synthetic rubber production provides elastomers which would otherwise have to be supplied by natural rubber imports.

2. Estimate of Normal Yearly Requirements

Since World War II efforts to increase production capacity of rubber fabricating plants have been made, and increased import demands of natural rubber can be expected. The following table represents normal yearly requirements for the USSR and Satellites:

Albania	- negligible	Hungary	- 3,000 tons
Austria	- 6,000 tons(increasing)	Poland	- 6,000-10,000 tons(increasing)
Bulgaria	- 1,000 tons	Rumania	- 1,500 tons
Czechoslovakia	- Formerly around 15,000-20,000 tons - now about 30,000 tons.	USSR	- from 50,000 to 70,000 tons with possible increase.

3. Estimate of Yearly Rubber Imports by Countries since 1946

	1946	1947	1948	1949
Albania	-	-	-	-
Austria	500	1,470	3,832	8,182
Bulgaria	-	300	150	925
Czechoslovakia	8,000	14,767	23,358	22,000
Hungary	256	2,377	3,000	4,750
Poland	1,450	2,250	3,600	12,000
Rumania	-	100	1,000	1,250
USSR	9,500	44,500	129,400	105,000

4. Estimate of Rubber Exports from Country of Origin to USSR and Satellites for 1948, and 1949 (direct shipment)*

	1948 Total	Malaya	Indonesia	Other
Albania	n.a.	-	-	-
Austria	n.a.	-	-	-
Bulgaria	n.a.	-	-	-
Czechoslovakia	4,377	4,377	-	-
Hungary	n.a.	-	-	-
Poland	2,197	1,940	257	-
Rumania	n.a.	-	-	-
USSR	103,593	103,593		

	1949 Total	Malaya	Indonesia	Other
Albania	n.a.	-	-	-
Austria	n.a.	-	-	-
Bulgaria	342	342	-	-
Czechoslovakia	4,641	4,641	-	-
Hungary	285	285	-	-
Poland	8,535	7,909	626	-
Rumania	1,112	1,112	-	-
USSR	63,464	63,414		50 1/

1/ From Sarawak

* Discrepancy between yearly rubber imports by countries (Par. 3) and rubber exports from country of origin to the USSR and Satellites for 1948 and 1949 Par. 4) is not shown, but is accounted for by re-exports largely from UK, Netherlands and China.

5. (a) Major Producers in Country of Origin

Rubber estates in Malaya, Indonesia, and Ceylon.

(b) Known Shippers from Country of Origin to USSR and Satellites.

No details are available on this question, except for the case of the USSR, but it is probable that most of the Satellites follow regular trade channel routes as has the USSR. However, the USSR also has procured rubber through means of UK trade treaties, whereby certain sterling balances are accumulated from delivery of grain and timber to Great Britain. In this case, sales were made in London, covering rubber and actual shipment was made by Malayan branches of representatives of London houses. Payment was then made through London banks to Singapore banks. However, some rubber is bought through regular trade channels, in some cases by Soviet agents, with payment in Straits Settlements dollars.

Rubber prices averaging 17.56 cents per pound in 1949 have risen to 25 cents per pound by 1 May 1950. Companies which have bought, procured, and made natural rubber available to the Soviet Union include the following:

East Asiatic Co., Ltd.

Maclaine, Watson & Co., Ltd.

Sandilands, Buttery & Co., Ltd.

Anglo-French & Bendixsens Ltd.

Hooglandt & Co.

Harrison & Crossfield

Borneo Co., Ltd.

Paterson, Simons & Co., Ltd.

K. C. Lee Rubber Co.

Rotterdam Trading Co.

Meine Compt Co.

(c) Known Consignee of Shippers

Rubber procurement was via Raznoimport, official trading company, and was shipped mostly by Soviet vessels to ports of Odessa and Batum. Minor shipments were made by vessels of other registry, and some came into the USSR at Leningrad. British and Netherlands consignees, names unknown, take care of shipments which are re-exported from these countries to the USSR and Satellite countries.

III. Certain Agricultural Products

U.S.S.R. and Satellites

1. Edible oils and fats

Although there have been some imports of fats and oils, the Soviet Orbit as a whole would not be seriously hurt if they were stopped completely. The present areas, Eastern Europe and Manchuria, supply sufficient quantities of vegetable and animal oils and fats to maintain industry and the armed forces. There would probably be some decrease in the general standard of living but it would not be serious enough to impair the working capacity of the people as a whole. Imports of edible fats and oils are not essential to the industrial and war making economy of the Soviet Orbit.

2. Cordage fibers

Jute and sisal have a low degree of essentiality to the U.S.S.R. and Satellites. Domestic fibers are available as substitutes. Small amounts of jute are being imported from India and Pakistan. No sisal is imported. Henequen, a hard fiber somewhat similar to sisal, is imported from Mexico. Imports by the U.S.S.R. in 1948 and 1949 were 31,000 tons and 10,000 tons respectively as compared to 14,000 tons in prewar. So far in 1950, 5,000 tons were imported by the U.S.S.R. Cessation of imports by the U.S.S.R. would not impair the industrial and war making economy because of the availability in the U.S.S.R. of substitute fibers.

Hemp is not in short supply in the U.S.S.R. and Satellites. The area is the largest producer of hemp in the world.

The current importation of fibers by the U.S.S.R. and Satellites is not a matter of absolute necessity, but are rather temporary measures until increased domestic production is effected.

3. Leather

The Soviet Orbit has been importing leather from South America. The amounts involved when compared to total consumption are negligible and if cut off would not impair the industrial and war-making economy. The elimination of leather imports would probably mean a slight decrease in the amount of shoes available to the civilian population but would be otherwise unimportant.

4. Cotton

For the Soviet Orbit as a whole, the necessity to obtain cotton from the Western or non-Orbit countries is probably a border line case. Total consumption prewar was approximately 870,000 metric tons of which 216,000

metric tons were imported from non-Orbit countries. For the 1948-49 consumption year, total consumption is estimated at 700,000 metric tons or 80 percent of prewar of which 148,000 metric tons or 20 percent was imported from the Western Countries. The decrease in consumption of raw cotton has been effected by rationing and a start has been made in substituting synthetic fibers such as rayon, perlon, etc.

The elimination of cotton imports from the Western Countries would accentuate an already tight situation in the supply of consumers' textiles. War and industrial uses would probably be unaffected. The net effects of a further decrease in the supply of textiles for the consumer is hard to measure, but it is felt that the Orbit could get along for one or at most two years without any critical difficulties. An immediate effect would be the closing of most of the cotton mills in Poland and Czechoslovakia.

IV. China and North Korea.

1. In the case of China, it will be noted that the estimate of essentiality of the various commodities includes a consideration of the implications to the Communist regime of large-scale unemployment in key urban areas as well as the direct effects on the economy resulting from China's failure to obtain these materials. Although less is known about conditions of internal stability in northern Korea, it is believed that economic considerations are far more important than political factors in an estimate of the essentiality of particular commodities. Thus, to the extent that it is possible to assess essentiality at all, entire emphasis has been placed on economic factors.

2. Although petroleum was not discussed in the USSR and Satellite sections, it is pertinent to note that, in the case of China at least, this commodity is second only to raw cotton in its degree of essentiality. When the Nationalist Government was in control of the mainland, principal sources of petroleum imports were the U.S. and the Middle East. It is believed that the Communists are obtaining some, although insufficient, amounts of petroleum products from the USSR.

3. Foreign trade data for northern Korea are virtually unavailable. Until 1945, trade statistics were recorded for the country as a whole; after the division of the country at the 38th parallel, no data were published.

4. Commodities listed on the initiation memorandum but which are available for export in China and northern Korea (e.g. tungsten) have not been considered in this analysis.

Degree of essentiality

The products examined in the sections below are raw materials for China's industries. The industrial sector is a minor segment of the nation's economy, however, so that none of these imports can be regarded as absolutely essential to the country as a whole. The economy of most of China is primitive and agricultural, and provides the population with the bulk of commodities needed to maintain their subsistence scale of living. It is thus comparatively unaffected by the volume of industrial imports.

Despite its relative unimportance in terms of the economy as a whole, however, the Chinese Communists have strongly espoused the objective of expanding the industrial sector in order to free the country from traces of "colonialism." The concentration of the industrial sector in the politically volatile eastern cities also adds to its strategic significance for the maintenance of Communist control. Thus, the maintenance of normal levels of output and employment in industry is a matter of considerable importance to the Communist regime. For the maintenance of output and employment in the industrial sector, raw cotton is by far the most important import examined below. China's textile mills occupy the largest segment of the industrial sector, accounting for over half of total employment in all of China's modern industry. Despite the efforts of the Chinese Communists to promote domestic cotton planting, the textile industry will continue to depend on a large volume of imports for the next few years, at least.

None of the other commodities examined below approach raw cotton in degree of essentiality. Rubber may be regarded as of moderate essentiality in view of the growing rubber goods industry, which accounts for approximately 5 percent of modern industrial employment in Shanghai and which employs a significant amount of workers in other cities as well. The degree of essentiality for copper and lead may also be considered moderate, the import of these products helping to maintain employment in the electrical and other light industries.

For the remaining items cited below, the degree of essentiality is low. Domestic mercury production could be expanded to compensate for the elimination of foreign sources of supply. Cobalt metal, industrial diamonds, mica, and flake graphite have not been imported in significant quantities. Cordage fibres have been imported in some quantity, but China's major reliance is on the finished product such as gunny bags. Leather imports will probably be reduced under the Communist regime since manufactures from these imports served to meet the needs largely of the well-to-do.

Normal yearly requirements and annual imports

The normal yearly import requirements of the materials examined below are presented in the following table. These requirements were estimated on the basis of imports for previous years with an allowance for probable increases in

the availability of domestic supplies (e.g. of cotton) and possible increases in demand (e.g. of rubber) with progress in industrialization. The annual requirement figures are estimated averages for the next 3 to 5 years.

The import figures, shown for 1946, 1947 and 1948, are taken from the Chinese Customs returns for those years. These data are not available for 1949. The absence of 1949 figures is not, however, considered a serious deficiency for purposes of this report since the Nationalists blockaded the China coast during the second half of the year and the import totals for 1949 are therefore not representative of normal yearly requirements.

TABLE I

CHINA-ANNUAL IMPORTS OF SELECTED COMMODITIES, 1946-1948
AND ESTIMATED NORMAL ANNUAL REQUIREMENTS
(in metric tons)

Commodity	1946	1947	1948	Estimated Normal Requirements
Mercury metal	8	19	N.A.	10
Cobalt metal	1/	1/	1/	2/
Industrial diamonds	1/	1/	1/	2/
Mica, strategic grade	1/	1/	1/	2/
Flare graphite	1/	1/	1/	2/
Rubber, crude	10,407	22,578	23,337	20,000
Jute, raw	6	2,558	6,730	8,000
Hemp, raw	712	80	567 3/	300
Sisal	4/	4/	4/	4/
Leather	4,225	1,200	107	300,000
Copper				8,000
Ingots and slabs	3,344	2,131	2,009	
Sheets and plates	1,076	223	421	
Wire	950	1,797	3,756	
Other	1,302	1,199	1,895	
Raw cotton	281,372	121,236 5/	89,522 6/	70,000
Lead				1,500
Pigs or bars	603	1,027	697	
Other	696	392	205	

1/ Not separately recorded. Possibly small amounts under "other" items.

2/ Unknown; probably negligible.

3/ Including flax and ramie

4/ Not separately listed. Known in Far East as Sisal Hemp. May be included under Hemp.

5/ Does not include UNRRA shipments of 73,710 metric tons

6/ Does not include ECA shipments of 68,040 metric tons

Source: Chinese Maritime Customs Trade Statistics

TABLE II

CHINA - ANNUAL IMPORTS OF SELECTED COMMODITIES,
1947 and 1948, BY COUNTRY OF ORIGIN
(In metric tons)

	1947	1948
A. MERCURY		
TOTAL	19	NA
Great Britain	3	NA
Hong Kong	4	NA
Italy	1	NA
Straits Settlements and F.M.S.	9	NA
United States	2	NA
B. RUBBER, Crude, including synthetic		
TOTAL	22,578	23,337
British North Borneo	78	-
French Indochina	751	40
Great Britain	199	362
Hong Kong	931	670
India	236	3
Iran	36	-
Japan	2	-
Macao	1	-
Netherlands East Indies	5	457
Philippines	6	10
Portuguese East Africa	8	-
Siam	50	-
Straits Settlements and F.M.S.	20,129	16,967
United States	146	4,743
Australia	-	1
Burma	-	-
Other countries, and unknown	-	84
C. JUTE, Raw		
TOTAL	2,558	6,730
Great Britain	244	
India	2,308	6,730
Siam	6	
D. HEMP, Raw		
TOTAL	80	567 1/
Philippines	80	535
United States	-	16
Korea	-	11
Netherlands East Indies	-	5

1/ Includes flax and ramie

(TABLE II, cont'd)

	1947	1948
E. LEATHER		
TOTAL	1,200	107
Argentina	144	
Australia	372	48
Brazil	65	-
Burma	1	-
Canada	6	3
French Indochina	3	-
Great Britain	15	3
Hong Kong	64	15
India	7	2
Siam	-	1
Straits Settlements and F.M.S.	3	-
Uruguay	7	
United States	513	34
Other		1
F. COPPER Ingots and Slabs		
TOTAL	2,131	2,009
Hong Kong	9	
United States	2,122	1,540
Canada	-	186
Great Britain	-	11
Other countries	-	272
G. COPPER Sheets and Plates		
TOTAL	223	421
Canada	-	2
Great Britain	120	179
Hong Kong	1	2
United States	102	195
Belgium	-	43
H. COPPER Wire		
TOTAL	1,797	3,756
Belgium	18	100
Canada	467	2,555
France		3
Great Britain	163	277
Hong Kong	214	85
India	32	-
Japan	203	400
Switzerland	3	-
United States	696	318
Unknown	-	18

	1947	1948
I. COPPER, Other		
TOTAL	1,199	1,895
Belgium	6	24
Canada	509	340
France	1	-
Great Britain	151	228
Hong Kong	143	36
India	-	95
Japan	105	-
United States	283	1,166
Unknown	-	6
J. COTTON, Raw		
TOTAL	121,236	89,522
Belgium	-	6
Brazil	14,415	3,675
British East Africa	183	982
Burma	1,294	3,258
Egypt (including Sudan)	2,812	485
Germany	3	-
Great Britain	28	-
Hong Kong	18	616
India	39,587	67,836
Mexico	156	87
Union of So. Africa and Rhodesia	682	-
Siam	-	26
United States	61,532	12,426
Other countries and unknown	526	125
K. LEAD Pigs or Bars		
TOTAL	1,027	697
Australia	129	5
Belgium	-	8
Canada	185	111
Great Britain	43	5
Hong Kong	68	10
Korea	-	11
Mexico	289	148
Straits Settlements and F.M.S.	9	-
Sweden	4	-
United States	300	399
L. LEAD, Other		
TOTAL	392	205
Belgium	33	6
Canada	7	-
Great Britain	50	9
Hong Kong	202	57
Korea		71
Macao	17	-
Straits Settlements and F.M.S.	2	-
United States	80	52
Other countries and unknown		10

SOURCE: Chinese Maritime Customs Trade Statistics

Known Shippers from Country of Origin

The identification of U.S. shippers to Communist China is a matter of primary interest to the Departments of Commerce and State and possibly to the Federal Bureau of Investigation. They will, therefore, not be included here.

Hong Kong is an important source of imports for Communist China and it is generally the case that few trading corporations would refuse to export any of the items under consideration. The following firms in Hong Kong represent an incomplete list of these which have made shipments to Communist China:

Copper and lead: WAY YUE COMPANY

Copper: TA CHUNG INDUSTRIAL COMPANY

Copper: UNIVERSAL TRADING COMPANY

Rubber: TAI TAK HONG

Rubber: HONGKONG ENTERPRISES LTD.

Rubber: BUTTERFIELD & SWIRE

Rubber: P.L. TANG & COMPANY

Rubber: DAH CHEN COMPANY

Cotton: HUNG HO CHANG

Consignees and terms of business

Government corporations in Communist China are conducting a steadily increasing proportion of the country's import trade. Although many private merchants still continue in the field, the trend is toward foreign trade monopolization by the government. In the past year, the Communist regime operating through its North China Import Company and other government corporations have been major importers. In many cases, these companies have made purchases through private importers, but at the same time, they have been making strenuous efforts to establish their own direct contacts with foreign sellers. In the coming year, the government should be increasingly successful in by-passing private intermediaries and acting as the direct consignee.

The North China Import Company has its counterpart organizations in other sections of China. Thus, in the Shanghai area, the East China Foreign Trade Company has been a large importer. Measures recently adopted by the Communist government in Peiping, however, appear to foreshadow the replacement of these regional organizations by nation-wide corporations, operating with affiliated

branches throughout the country and under the general direction of the Ministry of Trade.

Currently, the terms of trade are such as to assure sellers quick cash, i.e., payment before shipment or at time of delivery. A typical contract made in the sale of cotton specified 25 percent down payment before shipment, 70 percent on arrival of the carrying steamer and the balance of 5 percent upon checking of the weight.

NORTHERN KOREA

Degree of essentiality

The major part of northern Korea's industrial segment is comprised of heavy industry. Many of the commodities listed in the reference memorandum constitute raw materials for light, consumer goods industries. Thus, although northern Korea is in need of cotton textiles, cordage, nets, gunny sacks, rubber and leather products, its ability to utilize raw cotton, cordage fibers and natural rubber is limited.

Mercury must be imported for the large chemical and munitions industries. Tin is required for the relatively important food processing industries. Although the degree of essentiality of industrial diamonds to the northern Korean economy is not known, the developing machine tools industry and the extensive mining operations probably necessitate diamond imports.

Normal Yearly Requirements

On the basis of the fragmentary data available, northern Korean requirements for raw rubber should not exceed 550 metric tons annually. Tin requirements should not exceed 50 metric tons annually. No information is available on any of the other commodities.

Actual Yearly Imports Since 1946

No information available.

Imports by Country of Origin for 1948 and 1949

Northern Korea's post-war trade did not experience any degree of revival until 1949, when barter trade with Hong Kong reached a level of HK $100,000,000. Prior to this, some trade with southern Korea existed until it was terminated in early 1949 by the Republic of Korea. Smuggling with southern Korea has persisted and some clandestine trade with Japan exists.

Available statistics for nothern Korea's 1948-49 trade are shown in Table III.

TABLE III

NORTHERN KOREA - IMPORTS OF SELECTED COMMODITIES
in 1948 and 1949, BY COUNTRY OF ORIGIN
(In metric tons)

A.	IMPORTS FROM SOUTHERN KOREA	1948 1/
	Natural Rubber	25
	Raw Cotton	3
B.	IMPORTS FROM HONG KONG	1949
	Natural Rubber	1,346
	Raw Cotton	239
	Mercury	10
	Tin plate	227
	Cordage fibers	3

1/ These data are estimated and are of questionable reliability and completeness.

Major producers in country of origin

The commodities under consideration have invariably been purchased through middlemen in Hong Kong and southern Korea who, in turn, have imported these commodities from third countries.

Known shippers from country of origin

Shipping manifests for 1949 indicate that the following Hong Kong organizations have consigned 3 or more shipments during the year to northern Korean ports:

WALLEM and CO. - 204/6 Wheelock Bldg., 110 Chung Cheng Rd., E.

YUEN YUEN Steam Ship Co. - No known address

TAI KONG (HONG) Trading Co. - 133 Yuen Ming Yuen Rd.

METROPOLITAN COMMERCIAL CO., LTD. - 81 Jinkee Rd., Rm. 505

FAR EAST ENTERPRISING CO., - York Bldg.

SOUTH WEST INDUSTRIAL CO. - 123 Canton Rd., Rm. 103.

YI TAI HONG - No further info.

CHINA TRAVEL SERVICE - 420 Szechuen Rd.

HONG-KONG EASTERN Steam Ship Co. - 5 Queens Rd.

Intelligence reports have indicated that EPWORTH PRIESTLY AND COMPANY, 20 Des Voeux Rd. and the TRINITY TRADING COMPANY, address unknown, are also active in this trade.

Consignees and terms of business.

It is believed that all shipments are consigned to the CHOSUN SANG SA (SHA) (Chosen Trading (Commercial) Company), a quasi-governmental organization.

The major portion of the Hong Kong - northern Korean trade is conducted on a barter basis. It is believed that northern Korea has accumulated some foreign exchange holdings in Hong Kong banks, but it is doubtful if these holdings are more than HK $5,000,000.

V. Soviet Zone, Germany

1. Cobalt

Degree of essentiality is unknown, but probably not great.

Normal yearly pre-war consumption for all of Germany was 500 tons. Domestic production was 100 tons, the principal source of the ore being Saxony in the Soviet Zone. The rest was imported, chiefly from Africa.

Production or import of Cobalt is not mentioned in Soviet Zone production plans or trade agreements. It may, however, be included under the general term "alloys", but in any case in very small amounts.

2. Strategic Grade Mica

Degree of essentiality is apparently not great.

No mica is produced in Germany. Pre-war requirements for all Germany were around 1,000 tons annually, which increased to 1,800 tons after 1937. The chief source of supply was India (80 percent), with small amounts from the US, UK, Argentina, Madagascar, Brazil and South Africa. During the war it was obtained from Norway and the Balkans. Present requirements are unknown and the material is seldom mentioned in official documents.

In the 1949 trade agreement with Bulgaria, mica was specified as among Soviet Zone imports, and delivery of 10 tons was reported.

November 1949 import figures show imports of $2,750 worth of mica powder from Yugoslavia and $6,000 from Rumania.

3. Cordage fibers (jute, sisal, hemp)

Degree of essentiality is probably great.

Army Intelligence Report of 14 February 1950 stated: "The Bast fiber industry of the Soviet Zone has suffered from the very inadequate raw material supply. In October 1949, the VVB Bast Fiber received offers for flax delivery from Egypt. Several hundred tons of hemp from Manila are expected, and 200 tons of hemp are allocated from South-East Europe. An Istanbul firm offered to sell the VVB jute products from Turkey." Present requirements are unknown.

Hemp production in the Soviet Zone in 1947 was 814 tons; in 1948 it was 1,000 tons (planned). No information is available on sisal or jute. The fiber industry is included under Textiles in Soviet Zone reports and no breakdown is generally given for its components.

Under the 1948 trade agreement, Yugoslavia was to export 500 tons of hemp to the Soviet Zone.

1949 Imports (first 9 months):

USSR	17	tons of hemp
Yugoslavia	351	" " "
Czechoslovakia	50	" of hemp and jute
USSR	166	" " " " "

November 1949:

Netherlands delivered 596,220 florins worth of hemp and oakum.

December 1949:

Netherlands delivered 1,375,220 florins of Yugoslavia hard hemp.

The 1950 textile production plan calls for imports of 5,000 tons of flax, jute, and bast fibers.

4. Flake Graphite

Degree of essentiality is probably not great.

Present requirements are unknown. Graphite is found in considerable quantities in Germany, principally in Bavaria and the largest refinery was near Munich. In 1938 output was 28,106 tons and imports 3,728 tons. Annual consumption was believed to be around 12,000 tons normally, and some was exported. The Soviet Zone may be getting graphite from this source, although no information is available on the subject. Principal pre-war suppliers were Austria, Czechoslovakia and Norway.

Imports:

1948 (1st 6 months)	Czechoslovakia	31 tons
1949 (1st 9 months)	Italy	90 "
1949 (1st 6 months)	Hungary	42 "

The 1949 trade agreement with Hungary provides for the export of graphite electrodes, no figures given.

The 1949 Czechoslovakia agreement calls for graphite electrodes and graphite coolers for hydrochloric acid.

5. Mercury

Degree of essentiality is probably great.

Present requirements are unknown. Pre-war requirements were large, averaging 680 tons annually up to 1939. German ore deposits are very few and of no commercial value. Domestic output for all Germany from domestic ore in 1939 was 120 tons; imports were 1,100 tons. Wartime supplies were obtained from Poland, France and the Netherlands.

Imports:

1947	Switzerland	17 tons
	Yugoslavia	2 "
1948 (1st 9 months)	USSR	156 tons
" " "	Czechoslovakia	20 "
" " "	Yugoslavia	71 "
(1st 6 months)	USSR	1,151 flasks
	Italy	936 "
	Yugoslavia	1,302 "
	Czechoslovakia	599 "
1949 (1st 9 months)	USSR	90 tons
	Switzerland	6 "
	Yugoslavia	20 "

State Department cable 2519 of 15 October 1948 reported two cars of mercury, presumably from the West, delivered to the Soviet Zone via Gutenfuerst, and 30 tons delivered via the Baltic ports.

January 1950 report showed a $10,000 compensation deal with Italy of fever thermometers for mercury.

6. Tin

Degree of essentiality is probably not great.

The principal German tin deposits are located in the Soviet Zone, but the mines are reported nearly exhausted and wartime output did not exceed 300 tons annually. Pre-war imports for all Germany averaged 4,000 tons, obtained chiefly from Netherlands East Indies, British India and Malaya. Present requirements are unknown. Soviet Zone tin production in 1948 was reported to be 46.2 tons plus 113.6 tons of tin concentrates.

Imports:

October 1948 from an unspecified sourse		105 tons
1949 (1st 9 months)	USSR	362 "
	Switzerland	1 ton
	Netherlands	85 tons
	Sweden	3 "

In January 1950 soldering tin valued at 2,667,200 Belgian francs was obtained from Luxembourg.

7. Industrial Diamonds

Degree of essentiality is very great.

Present requirements are unknown. German wartime industrial needs were estimated at 500,000 carats annually. Soviet Zone needs are probably considerably less than this, but great efforts are made to obtain diamonds from all sources, principally through illegal channels not reported in official statistics.

Imports:

1948 (1st 6 months)	Netherlands	6,444 carats
	Switzerland	640 "
	USSR	321 "
1949 (1st 9 months)	USSR	8,221 pieces
	"	18,129 carats
	Switzerland	2,182 pieces
	"	3,499 carats
	Netherlands	1,828 pieces
	"	13,282 carats
	France	2,764 carats

December 1949, 107,000 Swiss francs worth of industrial diamonds imported from Switzerland.

1950 (January)	Switzerland	250,000 Swiss francs
	Belgium	1,981 dollars
	Switzerland	32,310 "

8. Natural Rubber

Degree of essentiality is not great.

Enough synthetic rubber (buna) is manufactured to meet zonal requirements, which are kept very low. Production of buna in 1948 was 20,000 tons; in 1949, 29,000 tons (planned). About two-thirds is taken for export or reparations.

Small amounts of natural rubber are imported.

1948 (1st 9 months)	Netherlands	928 tons
1949 (1st 9 months)	Netherlands	1,270 tons
	USSR	424 "

November 1949 - 1,386,000 florins worth of natural rubber received from Netherlands.

January 1950 - 30,142 pounds sterling worth of natural rubber received from London.

9. Edible Oils and Fats

Degree of essentiality is probably great.

Actual requirements are unknown. Zonal requirements are not being met, however, and the Zone is largely dependent on imports.

In October 1948 the USSR shipped 115 tons of sunflower oil to the fat processing works near Dresden, and 26 tank cars of cottonseed oil to Pratau.

From February to May 1949 the USSR delivered 12,000 tons of edible fats (7,000 tons of vegetable and 5,000 tons of animal).

The 1949 trade agreement with Hungary called for the import of sunflower oil, castor oil, and hemp.

Additional imports reported in 1949 (1st 9 months):

Switzerland	10 tons
Netherlands	1,412 "
Norway	312 "

In addition the USSR was reported to have delivered 3,498 tons of margarine and 4,976 tons of butter in 1949. Small quantities of edible oils were received from Denmark (15 tons) and China (6 tons).

10. Leather

Degree of essentiality is believed great.

Actual requirements are unknown. Requirements are being met out of synthetic rubber and other ersatz materials.

Imports for the first 9 months of 1949 were:

From Poland	20 tons
" Switzerland	1 ton
" Sweden	85 tons

11. Copper

Degree of essentiality is probably great.

Copper production in 1949 from the Mansfeld mines was around 2,000 tons of metal per month. Zonal requirements are unknown, but considerable amounts of copper are imported in order to meet them, or possibly for reshipment.

Imports:

1948 (1st 6 months)	USSR	2,700 tons
1948 (1st 9 months)	UK	441 "
1948 (1st 9 months)	USSR	4,906 "
" " "	Switzerland	275 "
1949 (1st 3 months)	Belgium	368 "
1949 (1st 9 months)	USSR	2,749 "
" " "	Czechoslovakia	76 "
" " "	Switzerland	511 "
" " "	Yugoslavia	502 "

12. Cotton

Degree of essentiality is not great.

The Soviet Zone is entirely dependent upon outside sources for its supplies of raw cotton. Because of the difficulty of securing raw cotton, the USSR has been expanding the artificial fiber industry of the Zone, and normal yearly requirements have been very irregular depending upon the extent to which the USSR has been able to supply the mills with raw material.

In 1947 the USSR delivered 21,800 tons of raw cotton to the Soviet Zone;

in 1948 only 7,000 tons. Deliveries in 1949 are unknown, although an official Soviet Zone statement of imports for the first quarter of 1949 includes 1,903 tons of cotton, source of supply not given. Any Army Intelligence Report of 23 February 1950 states that improved raw material receipts from the USSR made possible increased textile production in the last quarter of 1949. Due to deliveries of "considerable quantities of Egyptian cotton", the 39 mills in the VVB textile combine were said to have enough material to last them until the end of the year. Textile production plans for 1950 call for the import of 18,000 tons of cotton, source of supply not given. Nothing is known regarding degree of fulfillment of this plan.

13 & 14. Tungsten and Molybdenum

Degree of essentiality is believed to be great.

Neither mineral is found in Germany, which obtained its pre-war supplies from the US, China, India, Burma and Bolivia. In 1938 imports of tungsten (12,000 tons) and molybdenum (5,000 tons) reached a peak. Tungsten production in 1948 was 78.7 tons, exclusive of SAG's.

Soviet Zone imports have been small but the supply fairly regular. The 1948 trade agreement with Sweden called for delivery of unspecified amounts of both minerals. From July 1948 to June 1949 Sweden delivered 300,000 kronor worth of tungsten and molybdenum. The 1949 trade agreement with Switzerland called for delivery of 500 kg of tungsten wire and 300 kg of molybdenum wire.

Other imports:

1949 (1st 9 months)	USSR	1 ton of tungsten and molybdenum wire.
	Switzerland	4 tons " " "
	Denmark	1 ton " " "
	Sweden	61 tons " " "
1949 (November)	17,000 florins worth of tungsten wire acquired from The Netherlands.	
1949 (December)	11,230 Swiss francs worth of molybdenum sheets and 2,640 Swiss francs worth of tungsten wire from Switzerland.	
1950 (January)	1,790 Swiss francs worth of tungsten wire acquired from Netherlands.	

SECRET

15. Lead

Degree of essentiality is probably great.

Requirements are unknown, but are probably not being met because the lead industry was always greatly dependent upon imports. About 80 percent of the lead-zinc ores in Germany are located in the Soviet Zone. Production in 1948 was 11,997 tons, exclusive of SAG's.

Imports of lead or lead concentrates:

1948 (1st 9 months)	Switzerland	125 tons
" " "	USSR	3,709 "
" " "	Yugoslavia	1,034 "
" " "	Poland	3,000 "
1949 (1st 9 months)	USSR	2,653 "

[redacted]