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I.S.R.
Aug.-

10000/148/1569

I.S.R. MATERIAL PROGRAMME
AUG. - NOV. 1945

The following figures for the period 1 - 15 November 1945.,
show the present position:

Passenger trains.

No of passengers carried	<u>8.029.183</u>
Kms run: Electric	348.576
Coal	468.250
Diesel	296.832
Diesel Electric	14.075
	<u>Tot. 1.250.933</u>

Mixed trains.

Kms run: Electric	20.002
Coal	64.834
Diesel	8.910
Diesel electric	
	<u>Tot. 93.746</u>

Freight trains.

Kms run: Electric	358.499
Coal	471.667
Diesel	233.706
Diesel electric	4.826
	<u>Tot. 1.068.698</u>
Total Kms. run all types.	<u>2.413.377</u>

The following figures for the period 16 - 30 November 1945, show the present position:

Passenger trains.

No of passengers carried	<u>8.935.326</u>	
Kms run: Electric	469.753	
Coal	442.425	
Diesel	261.454	
Diesel Electric	25.064	
		<u>Tot. 1.222.836</u>

Mixed trains.

Kms run: Electric	18.910	
Coal	75.303	
Diesel	6.648	
Diesel Electric	-----	
		<u>Tot. 100.863</u>

Freight trains.

Kms run: Electric	358.528	
Coal	453.118	
Diesel	230.936	
Diesel Electric	1.460	
		<u>Tot. 1.080.423</u>
Total Kms. run alla types.	<u>2.404.202</u>	

To The Director
E.C.I.T.C.
Building.

1. Herewith replies to the questionnaire you handed me.

Question No 1.

Following is the situation received from the Ministry of Transport re the private standard gauge railways.

SITUATION OF LINES & PLANTS

<u>Line & Plants.</u>	<u>Total 1945</u>	<u>Remarks.</u>
Total length of lines operated Km.	2200	1
Double track lines operated Km.	20	
Station tracks operated Km.	---	
Electric traction line operated Km. ...	590	
Iron bridges 3 meters and more serviceable No	700	
As above Km.	6	
Tunnels serviceable No	100	
Telegraph lines	700	
" " serviceable Km.	600	
Points No.	70	
Telephone lines Km.	2200	
" " serviceable Km.	1600	
Points No.	200	
Automatic block serviceable Km.	---	
Semi-automatic block serviceable	---	
Block points serviceable	---	
Levers for central switching apparatuses serviceable	---	
Electric levers Km.	---	
Other type Km.	---	

SITUATION OF ROLLING STOCK

<u>Vehicles</u>	<u>Total 1945</u>	<u>Remarks</u>
Flats	100	1
Box cars	770	
H.S. gond cars	350	
Pes (Bagies flats)	---	
Refrigerators	---	

Total length of lines operated Km.	2200
Double track lines operated Km.	20
Station tracks operated Km.	---
Electric traction line operated Km.	590
Iron bridges 3 meters and more serviceable No.	700
As above Km.	6
Tunnels serviceable No.	100
Telegraph lines " serviceable Km.	700
Points No.	500
Telephone lines Km. " serviceable Km.	70
Points No.	2200
Automatic block serviceable Km.	1600
Semi-automatic block serviceable Block points serviceable Levers for central switching apparatuses serviceable Electric levers Km. Other type Km.	200

SITUATION OF ROLLING STOCK

<u>Vehicles</u>	<u>Total 1945</u>	<u>Remarks</u>
Flats	100	
Box cars	770	
H.S. gond cars	850	
Poz (Pogies flats)	---	
Refrigerators	---	
Tank cars	60	
Coaches	1000	
Luggage vans	32	
Dining cars	---	
Sleeping cars	---	
Auto-rail cars	28	
Electric rail cars	460	
Electric train sets	---	
Steam	230	
& Electric Locos	45	
		1677

MAINTENANCE OF ROLLING STOCK

Vehicles	Total 1945	
Estimated output of steam Locomotives shops . Including roundhouse shops As above for electric locomotives Estimated output of cars workshops: No Cars repairs No of coaches repairs No of luggage vans repairs		The Locomotive shops are in relation with the numbers of locomotives and their services and there are no information available at this moment. The same must be said for the workshops for usual repairs. For important repairs the Companies operating railways make use of private industrial workshops.

Question No 2.

The following are the lines or stretches of lines which were opened to traffic after 1939 :-

- Turin Compartimento
Siding De Crocetta - 3^o Lagrange double track between lines Turin-Medane (L.50) and Turin-Milan (L.53) near the Turin Doria station.
- Milan Compartimento
Double track between Arona and Domodossola (L.54)
- Venice Compartimento
Verona station P.N. : double track siding between the lines Bologna-Verona (L.69) and Verona-Brennero (L.69), double track siding between the lines Milan-Verona (L.53) & Verona-Brennero (L.69)
Venice station-Mestre: double track siding between the lines Milan-Venice (L.53) and lines Mestre-Trento (L.173) Mestre-Mine (L.71) and Mestre-Trieste (L.84)
Line Crisignano di Zocco-Campomampiero-Treviso (L.167) single track
- Trieste Compartimento
Line Trieste-Servola-Trieste Aquilina single track.
- Bologna Compartimento
Bologna Central station: double track siding between the lines Bologna-Verona (L.65) and Bologna-Ancona (L.86) with the lines Florence-Bologna (L.65) and Bologna-Verona (L.69); Bologna-Milano (L.65); Bologna-Padova (L.85); Bologna-Treviso (L.167); Bologna-Pistoia (L.210).
- Florence Compartimento
Stretch Castelnuovo-Garfagnana-Piazza al Serchio lengthening of the Lucca-Castelnuovo Garfagnana (L.215) single track.
- Ancona Compartimento
Double track Orte-Terni (L.87). Line Fano-Fernignano (L.241)

Turin-Modane (L.50) and Turin-Milan (L.53) near the Turin Doria station.

Milan Compartimento

Double track between Arona and Domodossola (L.54)

Venice Compartimento

Verona station P.M. : double track siding between the lines Bologna-Verona (L.69) and Verona-Brennero (L.69), double track siding between the lines Milan-Verona (L.53) & Verona-Brennero (L.69)
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Line Crisignano di Zocco-Camposempiero-Treviso (L.167) single track

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Florence Compartimento

Stretch Castelnuovo-Garfagnana-Piazza al Serchio lengthening of the Lucca-Castelnuovo Garfagnana (L.215) single track.

Ancona Compartimento

Double track Orte-Termini (L.87). Line Fano-Fermignano (L.241) single track put again in operation.

Rome Compartimento

Double track line Rome Tiburtina - scalo Rome Smistamento - Settebagni.

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Naples Compartimento

Double track Grignano - Aversa (L.91)
Siding B° Nocera-Nocera Superiore between the lines
Cancello-Codola (L.284-243) and Naples-Salerno (L.95)
single track,

Bari Compartimento

Foggia station : double track siding between the lines
Naples-Foggia (L.91) and Foggia-Bari (L.86).

Bari station : single track siding between the lines
Foggia-Bari (L.86) and Bari-Taranto (L.295).

Brindisi station : Single track siding between the lines
Bari-Brindisi (L.86) and Brindisi-Taranto (L.95).

Taranto station : single track siding between the lines
Bari-Taranto (L.295) and Taranto-Metaponto (L.95).

Palermo Compartimento

Palermo station : single track siding between the lines
Palermo-Messina (L.98) and Palermo-Trapani (L.100).

We deem that all the above mentioned lines should be kept
and opened to traffic.

Eng. Lo Cigno informs :

The line Cremona-Moselice has been constructed approx. 60 years
ago and is a parallel line to the Milan-Venice line -very important
will be kept open to traffic.

The Lines Grignano-Treviso and Pontedera-Lucca will be
dismantled in order to have more rails to use for other lines.
There are no other lines which will be pulled up.

Question No 3.

The latest figures available are for October 16-31 and are
appended.

The following figures for the period 16-31 October 1945.,
show the present position:

Passenger trains.

No of passengers carried	2,503,778
Kms. run: Electric	476,811
Coal	460,880
Diesel	293,350
Diesel electric	13,835
Tot.	1244,876

Mixed trains.

Kms run: Electric	19,892
Coal	74,555

1673

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Diesel electric	13,835
	<u>Tot. 1244,876</u>

Mixed trains.

Kms run: Electric	19,892
Coal	74,555
Diesel	7,300
Diesel Electric	-----
	<u>Tot. 101,747</u>

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Freight trains.

Kms. run: Electric	289,033
Coal	485,120
Diesel	258,971
Diesel electric	14,119
	<u>Tot. 1,047,243</u>

Total Kms. run all types. 2,311,430

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Diesel electric

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Tot. 93.746

Freight trains.

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Coal

471.667

Diesel

233.706

Diesel electric

4.826

Tot. 1.068.698

Total Kms. run all types.

2.413.377

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Question No 4.

1. Lists of materials required by the I.S.R. were screened and passed by the rail division to A.C. Transportation Sub-Commission in August 1945. It is not known if these have been forwarded to Washington or not.

The matter is still under investigation, 90% of this list was for raw materials.

2. A lists of materials required by the I.S.R. for military purposes was sent forward by M.R.S. in July and this material is now arriving.

3. No requests have been put forward by the Privately owned railways through this division but a request for materials has been sent to the Ministry of Reconstruction.

Question No 5.

a) Appended is report on the copper situation.

1. The quantities of copper requested by I.S.R. for the railway re-electrification are:
for the program July-December 1945tons 4500
for the program 1946.....tons 7500

2. I understand that the total quantity of copper granted for 1945-46 to the Italian Government is 19000 tons, 5500 of which for I.S.R. re-electrification.

This quantity is intended only for bare conductors (for contact lines and H.F. lines) because the copper needed for electric machines, apparatus, etc. will be taken from the quantity given to the industries, viz from a part of the remaining 13000 tons.

3. Until now 5000 tons have arrived, 1350 of which have been allotted for I.S.R. re-electrification.

4. About the next shipments from U.S.A., the Minister of Industry and Commerce invited the representatives of I.S.R. to a meeting for the division of the copper that is expected in the near future. This meeting will take place on January 10th and after I shall let you know the allotments for I.S.R.

The chief cause of delay in re-electrification is not copper but

Shortage of transformers

Shortage of rectifiers

Damage to substation buildings.

b) Rail situation.

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for the program July-December 1945tons 4500
for the program 1946.....tons 7500

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This quantity is intended only for bare conductors (for contact lines and H.T. lines) because the copper needed for electric machines, apparatus, etc. will be taken from the quantity given to the industries, viz from a part of the remaining 13500 tons.

3. Until now 5000 tons have arrived, 1350 of which have been allotted for I.S.R. re-electrification.

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Damage to substation buildings.

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b) Rail situation.

The steel plants manufacturing rails are not able to work double shift owing to the shortage of coal.

The following is position of rail production in Italy:

During the normal time the monthly average of the railway production was as follows:

ILVA - Piombino	monthly average	2.500 tons
ILVA - Bagnoli	"	2.000 "
PALCK - Sesto S. Giovanni	"	300 "
BREDA - Sesto S. Giovanni	"	300 "

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Actually recommenced production of rail in the factories:

Falck and Breda at Sesto S. Giovanni.

Their monthly output at the moment can be:

FALCK :	1.000 tons
BREDA :	1.000 tons

that is more than in normal time for these factories, as they have no contracts for other organisations.

We believe that soon it will be possible to commence works at the factories "ILVA" at Piombino and Bagnoli, where the production at the beginning will be less than the normal and we believe it will be possible to produce about 2.000 tons for each factory, if sufficient coal arrives in time.

As a war measure "ILVA" factory at Savona produced rail during the years 1942 and 1943.

Owing to set up of this factory we do not believe that it is now able to economically manufacture rail.

The monthly production would possibly be in the region of 500 tons.

The following rails have arrived at Genoa 2.500 ton for I.S.R. and 1.500 for private railways.

There are on order in the U.S.A. 70.000 tons of rails.

A further offer of 25.000 tons has been made and accepted.

All above are 2nd hand rails.

c) There has been a serious shortage of electrodes for steel production in electric furnaces. An attempt was made to manufacture these unsuccessfully from local material.

Arrangement are being made to import these from Switzerland.

d & e) The question of timber both for wagon repair and sleepers is serious by holding up repairs both to rolling stock and track repairs.

The situation is covered by the appended minutes No 102 of 10th meeting of Allied Railway Board held on 6th Nov. and letters from A.D. Tn. Stores and Chief of Rail Division.

Minute No. 102.

Chairman reported that U.S. Army had now decontrolled the Calabria and Bolzano zones, which action should ease the procurement situation for the I.S.R. The British Army had not yet been able to effect any decontrol of the BR. Zone, Calabria and the facts in this connection were being reported to D.Q.M.G. (Mov), G.H.Q. C.M.P. for consideration. Ing. Bracci reported on the I.S.R. supply position as follows:

Calabria Supplies. I.S.R. had only been successful in obtaining 6/7000 cb. m. for delivery this season. Further contracts were being made for forward deliveries in 1946.

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Bolzano. The 20,000 cb. m. promised by firms in this area had not materialized and he had sent a representative to

Bolzano to clear up difficulties and ensure release. An

Italian Timber Control Committee had been set up in Northern Italy and it was hoped that an allocation would be made to permit movement arranged through A.C. and P.B.S. to take place before winter set in.

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Chairman pointed out that the monthly consumption of timber for all I.S.R. purposes exclusive of sleepers was approx. 3500 cubic meters and requirements for months December to May inclusive would amount to 20/21,000 cubic meters of timber. Present contract would provide 6/7000 cubic meters leaving a deficiency of 14/15,000 cubic meters to be found if I.S.R. repair and reconstruction work was not to stop or be hampered.

Additional difficulties arise in connection with sleepers where 5 million were originally needed in 1945 but contracts let for 1,000,000 only, of which 600,000 were already delivered. 2,000,000 sleepers per year are normally required but war damage had necessitated heavy increase in requirements. Minimum requirements for 1946 were 3,000,000 sleepers, against which I.S.R. have been able only to contract for 1,000,000.

Ing. Bracci stated that Italy had always relied on the importation of certain types of timber in pre-war days.

The chairman proposed that A.C. Italy should take up with A.C. Austria the possibilities of procurement of timber from Austria sources for I.S.R. use. The need for urgent action by I.S.R. to cover potential deficiency in supplies was also stressed.

ACTION:- a) A.C. Tn. Sub-Commission to explore possible source of supply for I.S.R. in Austria.

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Attached is extract of Minute No. 102 of the Tenth Meeting of the Allied Railway Board, Stores Sub-Committee, held 6 November 1945.

This subject deals with the timber requirements for the Italian State Railways and it is brought out that there is an extreme shortage at the present moment and that this shortage will increase within the next few months.

It is pointed out that the U.S. Army has now decontrolled the zones in which they were cutting timber in the Calabria and Bolzano areas. Although the matter has been handled through G-4 (Mov & Tn) AFHQ to have the zones controlled by the British Military in Calabria and Northern Italy decontrolled, the decontrolling has not been accomplished to date. Further, it is pointed out that it is proposed that the Allied Commission, transportation Sub-Commission, explore the possible sources of timber supply in Austria for the Italian State Railways.

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It is the opinion of the Rail Division that Action should not be taken to procure timber from Austria, until the British have decontrolled the Calabria zone and the zones now controlled in Northern Italy. Certainly, we are not on firm ground to take such action as long as the principal timber zones of Italy are controlled by the Military. The war in Italy has now been over for seven months, many of the military depots are carrying large stocks of timber, while the reconstruction work and rehabilitation of equipment of the I.S.R. is being severely hampered due to lack of timber.

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This is an important matter and it is recommended that it be handled by the Chief Commissioner with the Supreme Allied Commander to effect the de-control of the timber zones in Calabria and Northern Italy, now under control of the British Military. Please send to this office for our file a copy of section taken.

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In view of a deterioration in the already difficult timber supply situation of the I.S.R. it is considered advisable to recapitulate.

Calabria area (former U.S. controlled zone).

I.S.R. maximum expectations are now assessed at 4,000 cb. m.

Bolzano area (former U.S. controlled zone).

It is found that prior to decontrolling the area the U.S. Forces requisitioned all sawn timber, which is now stockpiled at Leghorn. I.S.R. state that due to the low price paid by the Allied Military, cutting in the forests has been restricted to a minimum to avoid requisitioning or forced sale when sawn at an economical price. In these circumstances I.S.R. have been able only to obtain 2000 cb. m. from this source, logs are not available to cut further supplies and unless the winter proves exceptionally mild the 2000 cb. m. will be the total forthcoming from this source.

Leghorn (P.E.S. Stockpile).

P.E.S. have allocated to I.S.R. under U.S. M.R.S. arrangements 30 car loads of mixed timber, estimated at 1000 cb. m.

The total expected I.S.R. receipts from all sources is 7000 cb. m. against an estimated requirement of 20000 cb. m.; during period Dec. 45 to May 46, i.e. a deficit of 13000 cb. m.

Allied Commission advise they are still making enquires in regard to supplies ex Austria, although difficulties in connection with lire purchases have been forecast by Economic Sub-Commission. In these circumstances we have suggested a barter basis of exchange would yield the best results.

Since military responsibility for prevention of disease and unrest in Italy terminated 1 sept. 45, we are unwilling to place a military (Tn.Br.) demand on D.E.S. at this date for supplies for the I.S.R. and consider such procedure could not be justified on military grounds.

It is suggested that in addition to the A.C. exploration of supplies ex Austria that two other courses are open.

a) To secure I.S.R. access to the Br. zone Calabria to enable

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It is suggested that in addition to the A.C. exploration of supplies ex Austria that two other courses are open.

- a) To secure I.S.R. access to the Br. zone Calabria to enable them contract for limited supplies i.e. up to 13000 cub. m. for delivery Dec. 45 to May 46.
- b) That additional pressure be put upon P.B.S. to release further supplies ex Leghorn stockpile.

May suitable action please be taken.

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Question No. 6.

Effect of electrification on coal consumption.

1. Copper required to electrify 1 kilometre of railway (single line).

1 Km. of Main line	3600 Kgs.
1 Km. of sidings	2300 Kgs.

For 1 Kilometre of track the following is average requirement.

1 Km. of main line	3600 Kgs.
0.4 Km. of sidings	1000 Kgs.
0.2 Km. of feeders in stations	400 Kgs.

Total	5000 Kgs.
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This for every kilometre of single track electrified 5 tons of of copper are required.

2. It is not possible to correlate the amount of copper required for high tension lines to kilometres of track as these do not always follow the railway.

3. The high tension lines are in fairly good condition and are chiefly made of steel aluminium, which can be made in the I.L.L. of Porto Marghera Factory as soon as this is derequisitioned.

4. Coal consumption on the I.S.R. for the year 41-42 was as follows:-

Main line running	2.061.026 tons
Shunting	333.058 tons

Total	2.394.084 tons
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which is equivalent to 26.73 Kgs per train kilometre.

5. The coal consumption naturally varies over each section of the line due to the density of the traffic and the grade of the line.

6. The average weight of steam hauled trains per locomotive was 302 tons.

7. Total kilometres of track including double line steam operated is 11,400 Kms.

Total train kilometres (steam) run during 1941-42 was 89,561,539 (steam hauled).

This gives a traffic density of 7856 trains yearly or 215 daily per kilometre of track.

8. The average weight of electrically hauled trains is 391 tons per locomotive.

Total train kilometres (electric) run in 1941-42 was

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7. Total kilometres of track including double line steam operated is 11.400 Kms.

Total train kilometres (steam) run during 1941-42 was 89.561.539 (steam hauled).

This gives a traffic density of 7856 trains yearly or 215 daily per kilometre of track.

8. The average weight of electrically hauled trains is 391 tons per locomotive.

Total train kilometres (electric) run in 1941-42 was 89.444.486.

Total length of track operated electrically 5403 kilometres.

This gives traffic density of 16554 trains yearly or 45 trains daily.

9. The importation of 1000 tons of copper will electrify 200 km. of track and thus save the running of 1.571.200 steam train Km. each train Km. requires 26.73 Kgs. of coal.

- 8 -

We thus have a saving of 42,000 tons of coal annually.

10. The figure of 42,000 tons is also obtained by taking the total import of coal 2,394,084 tons required for 11,400 kilometres of track which gives 210 tons per kilometre or 42,000 for 200 kilometres.

11. This saving is of course based on the assumption that the electric current will be obtained from hydro-electric plants.

A.H. STREET, Lt. Col.
Chief of Rail Division.

January, 9th, 1946

Tn. Sub-Comm. A.C.

January, 9th, 1946
Tn. Sub-Comm. A.C.

1887

MEETING ON I.S.R. MATERIAL PROGRAMME MEETING HELD 27 December 1945
COL. EUGENIAN, Lt. Col. GIBSON, Mr. HOSS, Messrs Sullivan.

h7c 91

1. To be determined what was left of I.S.R. organisation, Tn/AC side.
2. To prepare a project to obtain loan for financing I.S.R. material reconstruction programme.
3. Major report does not go far enough, requires details project, condensed.
4. Mr. Richard has in hand project by Comptiments giving a true picture as compared with 1939 bases, stated any ~~signal~~ ^{single} phase of major plane which shows this.
5. Must go step further - break down to raw material to be imported certain items have to be imported already manufactured.
6. To clear this point, I.S.R. should agree that all could be manufactured here - less than 10% imported.
7. Import and Export Bank - On loan what time factor, any strings as to be use ~~on~~ ^{of} loan.
8. If coal available consider Italy can produce 80% of normal manufactures.
9. Better to buy certain electrical and specialised signal equipment ready made.
10. Power station will have to be coordinated as I.S.R. buy power and also in some cases sell power. ^{only}
11. If dollars supply for raw materials all what will I.S.R. request. ^{Sent}
12. Have meeting with I.S.R. to ~~present~~ ^{Sent} out break down to put into operation ~~reconstruction~~ ^{collecting} lines.
13. Ties - ~~Not yet left~~ ^{Should be left} - 2 strong letters written to A.P. H.Q.
14. This would have to be rehabilitated first.
15. To submit a ~~questionary~~ ^{questionnaire} or obtain a general outline what is required from the above from I.S.R.
16. Main requirement to be imported coal, track complete, timber or steel sleepers; copper, pig ^{iron}, and Allied manufactured chemicals.
17. I.S.R. requisition of June 1945 now arriving; this was a military commitment made up in conjunction with I.S.R. - ~~to be required for I.S.R.~~

6. To clear this point, I.S.R. should agree that all could be manufactured here - less than 10% imported.
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8. If coal available consider Italy can produce 80% of normal manufactures.
9. Letter to buy certain electrical and specialised signal equipment ready made.
10. Power station will have to be coordinated as I.S.R. buy power and also in some cases sell power. *only*
11. If dollars supply for raw materials all what will I.S.R. request. *Sent*
12. Have meeting with I.S.R. to ~~resort~~ out break down to put into operation ~~various~~ collecting lines.
13. Ties - ~~Portuguese~~ *Shaw* not yet left - 2 strong letters written to A.R. H.R.
14. This would have to be rehabilitated first.
15. To submit a questionnaire or obtain a general outline what is required from the above from I.S.R.
16. Main requirement to be imported coal, track complete, timber or steel sleepers; copper, pig ^{iron} and Allied manufactured chemicals.
17. I.S.R. requisition of June 1945 now arriving; this was a military commitment made up in conjunction with I.S.R. - this material now available is required for I.S.R. - Major Barnes has the file and will see Lynch - this 1946 material is now being handed over to P.R.S.
18. In addition to above ~~that~~ *is* the A.C. - I.S.R. requisition of August - ~~this material~~ *is* ¹⁵ be beginning to arrive. 10% - 20% of
19. Can be estimated - all double tracks are now single - ~~40%~~ of single will have to be relaid this means approx. 1300 Km. of tracks to be doubled.

COICD (ORION) ITAL
c/o H.Q. ALLIED COMMISSION
(Transportation & Shipping Sub-Commission)
C.M.F.

Ref. G - 112.

Tel. 843.458.

31 December 1945.

Subject : DISPOSAL OF SURPLUS TRANSPORTATION STORES IN ITALY.

To : (see distribution)

1.-

ORGANIZATION FOR DISPOSAL OF BRITISH STORES.

- (a) British Surplus Stores are handled by the Chief Disposals Officer, Ministry of Supply, Italy, with H.Q. at Rome. He also covers Greece, N. Africa, Gibraltar and the Azores. The general policy is to dispose of all surpluses to the Government of the country in which the surplus is located, as soon as the War Office or other authority is located. The Italian Government has undertaken to accept all surpluses in Italy; it gives a receipt for the quantities taken over in situ, adjustment being made later between London and Rome.

The policy regarding Greece is, however, not yet settled.

- (b) The C.D.O. had not previously heard of the existence or functions of ECITO. He asks that ECITO give any advice regarding allocations as quickly as possible, since he cannot delay disposal owing to the difficulty of guarding and the risk of deterioration. He pointed out that, in view of the agreement mentioned in para a (i) the allocation of any declared surplus from Italy to a country outside would have to be discussed with the Italian Government. It is preferable that allocation to other countries be deducted from the quantities declared surplus, before notifying the Italians.

2.-

DISPOSAL OF SURPLUS BRITISH TRANSPORTATION STORES.

- (a) On 21st August the Director of Transportation issued an instruction setting forth the policy to be adopted for the disposal of transportation stores in the C.M.F. including British Zone Austria, to implement the orders received from the War Office and A.T.H.Q. One copy is enclosed herewith. It will, however, be observed in para (c) below, that D.Tn. responsibility for the British Zone Austria ceases on 1st January 1946.

- (b) The present situation is as follows:

- (i) Ports projects to cover all Transportation Stores in each British operated port, which it is recommended be transferred when the operation is taken over by A.C., are almost ready for submission to the War Office for approval. Since August, many of these ports have been handed back to the Italians, who have been loaned the necessary equipment to work them.

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The policy regarding Greece is, however, not yet settled.

- (b) The C.D.O. had not previously heard of the existence or functions of EOLTC. He asks that EOLTC give any advice regarding allocations as quickly as possible, since he cannot delay disposal owing to the difficulty of guarding and the risk of deterioration. He pointed out that, in view of the agreement mentioned in para a (i) the allocation of any declared surplus from Italy to a country outside would have to be discussed with the Italian Government. It is preferable that allocation to other countries be deducted from the quantities declared surplus, before notifying the Italians.

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- (ii) Permissible way materials were declared to the War Office on 6th Dec (list at App.A). After retaining a military reserve, the balance of stock is surplus. Of this the War Office has released 10 miles for a project at Genoa, instructions for the remainder are awaited.

- 2 -

- (iii) Bridging and Trestling other than UCRB. List (App. B)
ready for submission to War Office.
- (iv) Trestling all types. List practically ready for sub-
mission to the War Office. A list of trestling on loan
to Greek railway disposed of to UNRRA is at App. C.
- (v) Pile driving equipment. List at App. D.
- (vi) Locos and rolling stock. Disposal is in hand. List at
App. E. List of Oil burning equipment is at App. F.
Rolling stock has been declared to War Office. List at
App. G.
- (vii) Hyster cranes have been declared to War Office, but the
majority are unserviceable. See App. H. Moreover no spares
are surplus, such stocks as there are being kept for
maintenance of Military requirements. List of other
types of cranes are in preparation.
- (viii) Harbour craft. All Tanac and Tusa tugs, Minca and Minus
barges and Ramped Cargo Lighters are considered as owned by
MWT, though the theatre responsibility is vested in the
Director of Transportation. MWT London have, however,
agreed that the Chief Disposal Officer can act on receipt
of War Office approval on behalf of the MWT.
The surpluses on the East Coast have been declared to
the War Office. See App. J, K & L. The situation on the
West Coast is still under discussion with the U.S. autho-
rities.
- (ix) Cranes Portal Wharf. Two are declared surplus in North
Africa, see App. M.
- (x) Cargo handling gear. List is being prepared.
- (xi) Minor items.
- | | |
|---------|---|
| Group A | Handtools; |
| " B | Machines, hand, and accessories, precision tools
and oxyacetylene plant; |
| " C | Lamps, fire extinguishers, and miscellaneous
store; |
| " D | Textiles and packings; |
| " E | Water supply equipment; |
| " F | Hardware, bolts and nuts; |
| " G | Non ferrous metals; |
| " H | Oils and paints; |
| " J | Building materials; |
| " K | Signalling equipment; |
| " L | Light railway material; |
| " M | Workshop and running shed equipment; |
- Stock has been taken but bids from Austria are awaited.
- Group S Inland Water Transport Material and stores and
maintenance stores not covered by other groups.
- Surplus has been declared to the War Office. See App. N.

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(xi) Minor items.

Group A Handtools;

" B Machines, hand, and accessories, precision tools and oxyacetylene plant;

" C Lamps, fire extinguishers, and miscellaneous store;

" D Textiles and packings;

" E Water supply equipment;

" F Hardware, bolts and nuts;

" G Non ferrous metals;

" H Oils and paints;

" J Building materials;

" K Signalling equipment;

" L Light railway material;

" M Workshop and running shed equipment;

Stock has been taken but bids from Austria are awaited.

Group S Inland Water Transport Material and stores and maintenance stores not covered by other groups.

Surplus has been declared to the War Office. See App. N.

(xii) Captured enemy material. List being prepared.

(xiii) Transportation Stores provided by Services other than Transportation.

General types. Disposal is in hand with the Services concerned.

(c) Arrangements have been made for copies of declarations of surpluses to be submitted to this Office in future, at the same time as they are despatched to the War Office. They will at once be forwarded to ORMOA.

- 3 -

(d) It will be observed that the forms included columns for bids by A.C. Italy, A.C. Austria and UNRRA, to be inserted before the declarations were made to the War Office. This system, however, resulted in these organizations raising many queries on financial and technical points, causing much additional work and delay in submission to the War Office. The present policy is to submit copies of the declarations to each organization and advise them to submit any bids direct to the Chief Disposal Officer, Ministry of Supply, Italy.

(e) The Chief Disposal Officer, M of S Italy has so far not covered Austria, British Zone. From 1st January 1946 A.C. Austria (British element), is responsible through Civil Affairs channels to Transportation, War Office for submitting demands to "prevent disease and unrest". D.Tn. Italy therefore asks A.C. Austria for his requirements, before submitting his final declarations to the War Office.

(f) Disposal is a complicated matter in the case of Lease Lend items, since the Agreement of the U.S. authorities has to be obtained. An example is the case of the 31 2-8-2 U.S. Lease Lend Locos, which are in use by the I.S.R. Normally the Director of Transportation does not obtain bids for Lease Lend stores. He declares to the War Office the stocks, requirements for military reserves and estimated surpluses. The War Office declares the global surplus and advise D.Tn. to report these to the Americans for disposal. Such reports are submitted on special U.S. forms to A.F.H.Q. who pass them to the U.S. Disposal Agency. If this Agency can dispose of them, the British Government is given a Lease Lend credit; if not, it informs D.Tn. that he can dispose of them and they are declared to the British Chief Disposal Officer in the normal way.

(g) It is understood that a new procedure for disposal of Transportation Stores is about to be introduced.

3.- DISPOSAL OF BRITISH TRUCKS & TYRES.

UNRRA bought 3000 3-ton trucks for Yugoslavia and Greece. A further 1000 have been purchased for Italy but delivery is slow.

4. DISPOSAL OF SURPLUS ADMIRALTY STORES.

The Chief Disposal Officer, M of S, states that a quantity of the surplus Naval stores are being handed over direct by the Royal Navy to the Italian Admiralty for the reequipment and maintenance of the Royal Italian Navy as reconstituted. Other stores are being concentrated in certain Naval Depots for disposal to the Italian Government. A large quantity of stores and some craft have already been disposed of.

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5.- DISPOSAL OF U.S. STORES.

1604

(a) All U.S. Stores are disposed of by an organization known as the Foreign Disposal Commission with H.Q. at Rome. It covers Italy and N.Africa but there are only a few Naval stores in the latter.

(b) The policy is to dispose of surpluses to the Italian Government against Dollar credits, but small amounts are sold to private firms etc.

UNRRA demands have, however, overriding priority.

- 4 -

(c) Locos and rolling stock.

All U.S. Locos and rolling stock have been or are about to be disposed of to the Italian Government. The principal items are:-

Locos standard guage	0.6.0	5
"	2.3.0	243
Box cars	40 ton	11
"	20 ton	553
Flats	50 ton	29
"	40 ton	51
"	20 ton	14
Gondolas high side	20 ton	20
"	low side 40 ton	2

All the above, and also the British locos and rolling stock declared surplus, have long been in service on the I.S.R. The disposal of them will thus in no way improve the present position.

(d) Railway workshop.

It is understood that a locomotive repair shop, which has been in use at PALERMO by the U.S. Navy mainly for the repair of landing craft engines, may soon be for disposal.

(e) Cranes and cargo handling gear.

A quantity of cargo handling gear and the following cranes have been disposed of at Naples for over \$ 500,000, to allow the Italians to work the berths already handed over:

40 ton	1
30 ton	2
10 ton	9
6 ton	1
4 ton	1

The Navy also have declared two or three cranes, 10, 70 ton plywood barges and one YOK steel barge surplus. There is no indication of the quantity of cranes, cargo handling gear etc. which will be declared surplus when the Americans finish with Leghorn, but it will be substantial.

(f) Tyres and trucks.

(i) The first 13,000 U.S. trucks declared surplus in Italy were purchased by UNRRA, the majority being allocated by that body to YUGOSLAVIA, GREECE and ALBANIA. Only 200 went to Italy. This deal is almost complete. An extremely rough estimate sets the total further eventual surplus at 10,000 load carriers and 10,000 other vehicles of all types. The present intention is to sell these to the Italian Government,

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(f) Tyres and trucks.

(i) The first 15,000 U.S. trucks declared surplus in Italy were purchased by UNRRA, the majority being allocated by that body to YUGOSLAVIA, GREECE and ALBANIA. Only 200 went to Italy. This deal is almost complete. An extremely rough estimate sets the total further eventual surplus at 10,000 load carriers and 10,000 other vehicles of all types. The present intention is to sell these to the Italian Government, UNRRA demands being satisfied, except for passenger carriers.

(ii) 90,000 used tyres of all sizes have been bought by the Italian Government, but a tyre repair unit is required to rebuild them. The units immediately available have been claimed by UNRRA for Yugoslavia and Greece. It is hoped, however, to be able to make one available for Italy.

6.- COORDINATION OF BIDS FOR SURPLUSES.

(a) As far as can be gathered there seems unlikely to be much competition for the railway material, locos and rolling stock.

- 5 -

- (b) UNRRA are, however, bidding for motor transport, tyres & shops for the Balkan States and have been given overriding priority by Washington as far as U.S. surpluses are concerned.
- (c) UNRRA, London, have authorized the procurement from the Chief Disposals Officer, Italy of the following British surpluses:-
- for Albania 2 Tanno tugs & Minca barges
for Yugoslavia 4 Tanac tugs 16 " "
together with spares and gear for 2 years' operation.
- a signal dated 17 Dec addressed to UNRRA CASERTA instructed them to arrange this deal with the LWT & C.D.O. Ministry of Supply.
- (d) It would therefore appear that UNRRA, London is collating bids for transportation material and allocating availabilities, subject to the agreement of UNRRA Washington to providing the cash.
- (e) It is, however, understood that the Greeks are needing cargo handling gear, but no bid has been received for a share of the Italian surpluses. This also applies to harbour craft.
- (f) It will be observed that A.C. Italy, A.C. Austria and UNRRA are all bidding for the same Articles in App. A, ~~B~~ C & E and A.C. Italy and UNRRA in App. K. Does ECITO intend to act as empowered by Article VII para 5 of the Agreement?

Recd. 17/1/44

R.W.L. FELLOWES,
Divisional Officer,
ECITO, OFMOA ITALY.

Distribution:

OFMOA/ECITO, c/o British Military Mission to Belgium R.A.O.R.
OFMOA Liaison ECITO, Berkeley Square House,
Berkeley Square, London, W.1.
A.F.H.Q. G 4 (Mov & Id) (without enclosures)
C.D.O., Ministry of Supply Italy. " "
A.C. Transportation & Shipping Sub Commission. " "
D.M.R.S. " "

SITUATION OF ROLLING STOCK

VEHICLES	South of Pisa-Rimini line			North of Pisa-Rimini line			T O T A L		
	1936	1939	1945	1936	1939	1945	1936	1939	1945
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Flats	3,986	4,700	3,120	5,379	7,080	2,021	9,965	11,780	5,141
Box cars	28,461	21,819	12,102	30,698	31,527	8,203	51,139	52,546	20,305
H. S. gond cars	21,708	18,762	11,020	32,559	34,217	15,064	54,267	52,262	26,084
Poz (bogies flats)	756	769	590	1,131	1,149	478	1,888	1,918	1,068
Refrigerators	1,263	1,840	821	1,893	2,760	1,112	3,556	4,600	1,933
Tank cars	694	628	1,350	1,041	1,017	1,281	1,735	1,675	2,631
Special cars	1,508	950	310	2,259	1,017	246	3,767	1,977	556
Coaches	2,462	2,822	512	3,793	4,227	842	6,255	7,049	1,354
Luggage vans	1,597	3,585	402	2,391	2,373	607	3,988	3,958	1,007
Dining cars	23	32	1	30	48	7	53	80	8
Sleeping cars	46	42	3	61	70	28	80	112	31
Auto-rail cars	65	431	353	120	273	179	185	704	532
Electric rail cars	43	82	66	29	76	42	72	158	108
Electric train sets	—	4	4	6	10	2	6	14	6
Coal burning locomotives: type A (for passenger train)	862	754	500	1,100	1,080	662	1,962	1,837	1,162
* B (for through freight train)	485	323	270	670	587	280	1,155	910	550
* C (for mixed trains) . for shunting	317	290	170	488	482	190	805	772	360
for shunting	365	310	155	400	396	135	765	706	390
Diesel switching engines (car- relli Badoni)	30	60	25	45	67	39	75	127	64
Electric locomotives	380	453	140	209	853	564	1,289	1,316	704
Number of electric locos, in order, for running, which cannot be operated due to lack of power or other reasons	—	—	20	—	—	92	—	—	112
Estimated output of Steam locomotives	—	—	—	—	—	—	—	—	—

1682

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Electric locomotives	380	463	140	209	853	564	1,289	1,316	704
Number of electric locos, in order, for running, which cannot be operated due to lack of power or other reasons	—	—	20	—	—	92	—	—	112
Estimated output of Steam Locos Shops, including Roundhouse Shops . . .	200	178	900	480	400	420	680	578	(1) 1,320
As above, for electric locos.	—	40	290	159	191	510	159	231	(2) 720
Estimated output of Cars Workshops:									
Number of cars repairs .	9,963	10,809	19,500	8,796	10,851	10,500	18,729	21,680	30,000
“ coaches “ . . .	2,623	3,049	1,920	2,554	2,763	1,080	5,177	2,812	3,000
“ luggage vans re- pairs	1,074	1,080	450	1,515	1,219	750	2,589	2,299	1,200

(1) (2) Including locos
burning diesel.The figures shown
at Cars Workshop
during the year
might have been

Rome, 15th July 1945

N.B. Rail available NOW

Ex Canada	15.000	tons	New
U.S.	70.000	"	---
U.S.	25.000	"	second hand.

Total = 1100 km of track

No fastenings, I.S.R. say they do not require them as these rails will be used for relay. This OK up to a point - They then said they would manufacture fastenings here but a certain % are required now for urgent work.

SLEEPERS - TIES - Notes of I.S.R. experience from Engr. Cavelli. *Feb 91 14*

Oak will last 10 - 12 years unimpregnated. Very good oak 20 years (this supplies to heart only). Pine impregnated imported from the Baltic before the war did not give good results. The best result of this timber came from sleepers made from the bottoms of the three.

Pine from Calabria impregnated if full of resin has a life of 8 - 10 years.

Another type of timber (faggio) beechtree which is obtained from Northern, Central Italy and Calabria, but this must be impregnated as it is stated that it only last 7 months unimpregnated.

Timber was, for sleepers, imported from Bosnia and Herzegovina (Austria).

STEEL SLEEPERS - Acciaieria di Piombino.

Manufacturing steel sleepers, it would be worth while to look into the question as to whether they could now recommence either from scrap or imported raw material that may arrive in the near future.

Reinforced concrete - Prior to the war I.S.R. carried out some experience with the usual results of too hard a road difficulty of finding suitable cushioning material between rail and ties, they also, had an additional trouble of inability to keep the fastenings, rail to tie, tied.

It would seem that in view of the shortage of ties that will not be overcome in the immediate future, it would be advisable to endeavour to design a reinforced concrete sleeper with a suitable type of cushion and fastening.

Impresa Di Penta have had some experience with reinforced concrete sleepers through I believe a Subsidiary Company and I propose to suggest that they liaise with the I.S.R. designer and see if the problem can be solved.

The difficulty of too rigid a tie might be overcome by the use of a light sleeper and prestressed reinforcement.

Rome, 14th December 1945

SLEEPERS - TIMBER - Notes of I.S.R. experience from Engr. Cavelli. *Feb 91 14*

Oak will last 10 - 12 years unimpregnated. Very good oak 20 years (this supplies to heart only). Pine impregnated imported from the Baltic before the war did not give good results. The best result of this timber came from sleepers made from the bottoms of the three.

Pine from Calabria impregnated if full of resin has a life of 8 - 10 years.

Another type of timber (faggio) beechtree which is obtained from Northern, Central Italy and Calabria, but this must be impregnated as it is stated that it only last 7 months unimpregnated.

Timber was, for sleepers, imported from Bosnia and Herzegovina (Austria).

STEEL SLEEPERS - Acciaieria di Piombino.

Manufacturing steel sleepers, it would be worth while to look into the question as to whether they could now recommence either from scrap or imported raw material that may arrive in the near future.

Reinforced concrete - Prior to the war I.S.R. carried out some experience with the usual results of too hard a road difficulty of finding suitable cushioning material between rail and ties, they also, had an additional trouble of inability to keep the fastenings, rail to tie, tied.

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The difficulty of too rigid a tie might be overcome by the use of a light sleeper and prestressed reinforcement.

Rome, 14th December 1945

Rome, 19th December 1945

M E M O

TO : Tn Sub-Commission, A.C.
Attn : Maj. Buckley

During normal time monthly average of the railway's rail production was as follows :

In tempi normali la produzione media mensile degli Stabilimenti produttori di rotaie era la seguente :

1. ILVA - Piombino - monthly average (media mensile)	2.500 Ton.
ILVA - Bagnoli " " " "	2.000 "
FALCK - Sesto S. Giovanni " " " "	300 "
BREDA " " " "	300 "

2. Actually recommenced production of rail in the Establishments : Attualmente hanno ripreso la laminazione di rotaie gli stabilimenti:

FALCK and BREDA di Sesto San Giovanni.

Their monthly product at the moment can be : La loro produzione media mensile attuale può ritenersi :

FALCK : 1.000 Ton.
BREDA : 1.000 "

that is more than normal time for these factories, because they have not contracts for other organisations maggiore cioè di quella dei tempi normali in quanto quegli stabilimenti hanno ora pochi impegni per altre laminazioni.

We believe that soon it will be possible to commence works at the factory "Ilva" at Piombino and Bagnoli, where the production, when they first start will be less than normal and we believe it will be possible to produce about 2000 Tons for each factory, providing sufficient coal arrives in time. Si ritiene imminente la ripresa della laminazione presso gli stabilim. "Ilva" di Piombino e Bagnoli, ove la produzione in un primo tempo sarà inferiore alla normale e si ritiene possa essere di circa tonn. 2.000 per ciascun stabilimento, subordinatamente alla tempestiva fornitura del carbone/

1659

3. As a war measure "Ilva" factory at Savona produced rail during 1942 and 1943.

Eccezionalmente ha laminato rotaie negli anni 42 e 43 lo Stab. Ilva di Savona.

Owing to set up of this factory we do not believe that it is now able to economically manufacture rail.

Per la limitata attrezzatura non si prevede che esso possa convenientemente riprendere tale laminazione.

The monthly production would possibly be in the region of 500 Tons. La produzione mensile potrebbe essere di circa 500 tonn;

/s/ ING/ LO CIGNO

PRO MEMORIA

A. C. SOTTOCCLIMISSIONE TRASPORTI

MARK BUCKLEY

5
6
7
8

During normal times monthly average of the railway's
In tempi normali la produzione media mensile degli Sta-
rail production was as follows:

11) ILVA - Piombino - Media mensile	2 500
-------------------------------------	-------

ILVA - Pagnoli	-	"	"	2.000
----------------	---	---	---	-------

FALCK - Sesto S. Giovanni
Media mensile " 300

BREDA -	"	"	"	"	"
					300

2) Attualmente hanno ripreso la laminazione di rotaie gli stabilimenti Falck e Preda di Sesto, S. Giovanni.

La loro produzione media mensile attuale può ritenersi:

Talck - Tonn. 1,000

Breda - Torn. 1.DDD

that is more than normal from per those factors because
meggiore cioè di quella dei tempi normali in, quarto quegli sta-
they have not contacts for other organizations.
ballamenti hanno ora pochi impegni per altre laminazioni.

Si ritiene luminante la ripresa della laminazione presso
gli Stabilimenti Ilva di Piombino e Baglioli, ove la produzione
in un primo tempo sarà inferiore alla normale e si ritiene possa
essere di circa tonn. 2.000 per ciascun Stabilimento, subordinata-
mente alla tempestiva fornitura del carbone.

3) *As a war measure, Ilva factory at Savona produced*
Eccezionalmente ha laminato rotale negli anni 1942 e 1943
Noni January 1942 and 1943 -
 lo Stabilimento Ilva di Savona.

Coming to set up of the factory we don't believe that it is not possible to economically manufacture such a conveniently to produce the lamination.

La produzione mensile potrebbe essere di circa tonn. 500.-

The production would probably be in the region

Rome, 19/12/945

IL CAPO DEL SERVIZIO LAVORI

Miss Alma
Cobb Economic Section Information

20 Aug 18

La loro produzione Media mensile attuale può ritenersi:

Salak -	Tonn. 1,000

Breda -
Momm. 1. DDD

mon. 1. DDD

Si ritiene imminente la ripresa della laminazione presso gli Stabilimenti Ilve di Piombino e Pasigoli, ove la produzione in un primo tempo sarà inferiore alla normale e si ritiene possa essere di circa tonn. 2.000 per ciascun Stabilimento, subordinatamente alla tempestiva fornitura di coke.

Es a war measure. Iva factory at Savona
 eccezionalmente ha laminato rotaie negli anni 1942 e 1943
 Noni chimney 1942 and 1943 -
 lo Stabilimento Iva di Savona.
 Quine lo set w

Per la lillitata attrezzatura non si prevede che esso possa convenientemente riprendere tale laminazione.

La produzione mensile potrebbe essere di circa tonn. 500.-
The production would be about 500 tons.

Roma, 19/12/945 of 300.1 mt

IL CAPO DEL SERVIZIO LAVORI

City, Canave Section Information

for all n

Mr. Richards
16th 8

Myat file
Trow file.

1 reel file. Rawlins work

File No _____
Jeli's letter were the other reports
& letters ref I.S.R materials for U.S.A
Until now the following quantities of copper

wire-bars have been delivered to I.S.R. :

1000 Tons arrived from U.S.A. at Civitavecchia with
the S/S James Blaine

350 Tons arrived from U.S.A. at Genova with
the S/S Ribera

No others materials have been ^{communicate} until now
by the Industry & Commerce Ministry.

15/12/1945

in *Edm*
16:17

HEADQUARTERS ALLIED COMMISSION
APO 394
TRANSPORTATION SUB-COMMISSION

IS.R

Material

19

Ref : 431/8/Tn 1

19 November 1945

SUBJECT : Italian State Railways Rehabilitation Programme.

TO : Supply group, Economic Section.

1. Attached herewith is a copy of a letter dated 19 October 1945, addressed by this Sub-Commission to the Italian State Railways, asking for their proposals for taking over stores to be imported for their rehabilitation programme, together with a copy of the reply dated 10 November 1945.

2. It is requested that you will inform this office if the arrangements proposed by the Italian State Railways are agreeable to you, and to U.N.R.R.A. in succession, so that the Italian State Railways may be notified accordingly.

Sgd/ P.D.G. BUCHANAN, Col.
Director.

Copy to : Requisition Branch
Economic Section (Acting Vice President)
U.N.R.R.A. (Italy)

C O P Y

MINISTRY OF TRANSPORT
I.S.R. Director General
Stores Service

Robt. MacGee
file

ROME, 10 November 1945
A.13/825/ICCA.7125/9

SUBJECT : I.S.R. Rehabilitation Programme.

TO : Tn. SUB-COMMISSION A.C. (Rail Div.)
Attn: Mr. R.P. Moss

1. Reference your letter 372/Tn 4 DATED 19th October 1945.

2. We thank you for the above communication and we assure you that we are able to take over - directly - materials coming from abroad and to distribute them whenever they are required to the firms manufacturing specific items.

3. In accordance with your request, we submit hereafter the relative programme, aiming to secure quick and free handlings by I.S.R.

a) As Naples, Civitavecchia, Genoa and Savona harbours are the nearest ones to those of our stores, still rather efficient, it would be suitable that the materials be unloaded at such harbours.

b) The I.S.R. "Agenzie Marittime" of Naples, Civitavecchia, Genoa or Savona might take over the materials at the ports, either when unloaded or abroad; in this latter case, we should timely receive the shipping documents in order to clear the goods.

As regard, the Agenzia Marittima of Naples we point out that they will be able to secure the discharge, provided that the local Allied Authority give their consent.

c) The "Agenzie Marittime" will have to despatch the unloaded materials to the next stores, as shown below: From Naples to the Store of Napoli Poggioreale and or to the Store of Roma Tiburtina. From Civitavecchia to the Store of Roma Tiburtina - From Genoa to the Store of Genoa Rivarolo and or to the Store of Milano Greco and or to the Store of Voghera - From Savona to the Store of Torino Smistamento and or to the Stores of Torino (via Nizza).

d) The "Agenzie Marittime" may directly despatch the materials to the manufacturing firms, if necessary.

e) The materials will be distributed from the a/m Stores to the various points.

from abroad and to distribute them whenever they are required to the firms manufacturing specific items.

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d) The "Agenzie Marittime" may directly despatch the materials to the manufacturing firms, if necessary.

e) The materials will be distributed from the a/m Stores to the various points of consumption, in the same way as for the others stocks. 163

4. It would be very useful to get a timely notice of the departure of each lot and of the port of arrival. This in order to allow us to advise, before hand, the outside Offices and to give them detailed instructions for the collection and the storage of the goods.

5. The Store Section HQ. of this direction will be at your disposal for any further agreements with you and with UNRRA.

sg/ Di Raimon e

INDUSTRIAL RAW MATERIALS.

I.R. ¹⁰/_{Materials}
file 597 //

[illegible]

1946 UNRRA PROGRAM FOR ITALY AND TOTAL ITALIAN IMPORT REQUIREMENTS.
INDUSTRIAL RAW MATERIALS.

		(\$ 000'S) cost		(000'S) Tons		\$ per ton	(000'S of tons)							
		total	UNRRA	total	UNRRA		1	2	3	44	5	6	7	8
<u>LUMBER:</u>	Total	60,000	-	2,000	-	30	150	150	150	150	150	150	150	150
	UNRRA	-	-	-	-		Not included in this program - Special UN							
<u>STEEL, STEEL PRODUCTS</u>														
<u>AND RAW MATERIALS FOR</u>														
<u>STEEL INDUSTRY:</u>	Total	39,880	-											
	UNRRA	-	-											
Semi finished steel	Total	25,000	-	500	-	50								
	UNRRA	-	-	-	-	"								
Pig-iron (special)	Total	,880	-	22	-	40								
	UNRRA	-	-	-	-	"	Not included in the UNRRA program.							
Steel scrap	Total	7,000	-	350	-	20								
	UNRRA	-	-	-	-	"								
Mineral for steel ind. (manganese, chrome, etc.)	Total	7,000	-	80	-	-								

PROGRAM FOR ITALY AND TOTAL ITALIAN IMPORT REQUIREMENTS.

INDUSTRIAL RAW MATERIALS.

SR 10 7
file 59 77

UNRRA	\$ per ton	(000'S of tons)											
		1	2	3	4	5	6	7	8	9	10	11	12
-	30	150	150	150	150	150	150	150	150	200	200	200	200
		Not included in this program - Special UNRRA problem.											
-	50												
-	"												
-	40												
-	"												
-	20												
-	"												
-	-												

Not included in the UNRRA program.

TRANSPORTATION SUB-COMMISSION, AC.
(RAIL DIVISION)
c/o. Transportation (Br) Main,
C.M.F.

Relate. Mat. file

Tel : 843238
Ref : AC/371/Tn 4

19 October 1945

SUBJECT : I.S.R. Rehabilitation Programme.

TO : Director General I.S.R.

1. In connection with the programme prepared showing list of finished and raw materials required by I.S.R. and industries who would be contracted by I.S.R. to manufacture specific items, it is understood that incoming should be consigned to the ITALIAN STATE RAILWAYS, who would act as distributing agents as needed.

2. It is possible that your incoming supplies will be dealt with by UNRRA, and it is therefore most desirable to have a detailed plan prepared in order that methods of distribution can be fully understood.

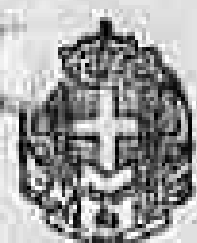
3. It is presumed that incoming traffic, consigned to I.S.R., will be taken over at the ports of arrival. Please say what arrangements I.S.R. have made for receiving the traffic, and for ensuring its distribution.

4. In fact, what is required is a short but definite plan to be arranged, whereby incoming traffic, as soon as notified, will be dealt with speedily by I.S.R. I have no doubt that this can be done efficiently by I.S.R. personnel but you are asked to prepare and advise this Sub-Commission of the step arrangements you intend to make for reception storing and dispersal of the expected supplies.

5. In view of the fact that UNRRA are anxious to receive this information it is asked that special attention be given to the matter.

for DIRECTOR
Sgd/R.P. Moss.

16³



MINISTERO TRASPORTI
DELLE COMUNICAZIONI

FERROVIE DELLO STATO
DIREZIONE GENERALE

Servizio Lavori

OGGETTO

Fornitura materiale
di armamento.

ALLEGATI N. _____

Roma 3 settembre 1945/94 .A.

N. L.3/50153/11/D.II.G.15

Al N. _____

del _____

TEN. COL. STREET

SOTTOCOMMISSIONE ALLEATA

- 1- In relazione alla richiesta fatta a codesta Sottocommissione si rimette il dettaglio del Materiale d'Armamento necessario per Km. 500 di binario completo di traverse nonché, in duplo i disegni relativi ad ogni particolare.

IL CAPO DEL SERVIZIO LAVORI

C. Romani

File 9 1652

MATERIALE DI ARMAMENTO

DETTAGLIO DEL MATERIALE RICHIEDSTO PER 500 KM. DI BINARIO

ROTAIE - Tipo americano dis. N. 6216

Peso delle rotaie Kg. 50,34 per ml. (16.101,49 per Yard)

Lunghezza delle rotaie 36 m.

Numero delle rotaie richieste 27.775

Peso rotaie Tn. 50.340.

Tipo americano dis. N. 6217.

Perché la ganascia tipo possa essere adoperata deve essere lavorata secondo i disegni N. 6240 e 6241.

Numero delle ganasce richieste 55.550

Peso delle ganasce Tn. 769

CHIAVARDE DI GIUNZIONE Tipo americano dis. N. 6246

Numero richiesto 111.100

Peso delle chiavearde Tn. 102

Marca FSP 219 Disegno N. 5063

Numero richiesto N. 27775

Peso dei piastroni Tn. 500

PIASTRE - Marca FSP 99 Disegno N. 4268

Numero richiesto 1.610.950

Peso delle piastre Tn. 12501

PIASTRINE- Disegno N. 6239

Numero richiesto 3.333.000

Peso delle piastrine Tn. 3333

CHIAVARDINE- Marca C.788 con riparella elastica doppia dis.N.5134-5121

Numero richiesto 3.333.000

Peso delle chiaveardine Tn. 2233

CHIAVARDINE- Marca C.788 con riparella elastica doppia dis.N.5134-5121

tipo americano dis. N. 6217.
Perché la ganascia tipo possa essere adoperata deve essere lavorata secondo i disegni N. 6240 e 6241.

Numero delle ganasce richieste 55.550

Peso delle ganasce Tn. 769

Bolt's machine
CHIAVARDE DI GIUNZIONE Tipo americano dis. N. 6246

Numero richiesto 111.100

Peso delle chiavarde Tn. 102

Marca FSP 219 Disegno N. 5063

Numero richiesto N. 27775

Peso dei piastroni Tn. 500

Tee Paster
PIASTRE - Marca FSP 99 Disegno N. 4268

Numero richiesto 1.610.950

Peso delle piastre Tn. 12501

Clap's
PIASTRINE- Disegno N. 6239

Numero richiesto 3.333.000

Peso delle piastrine Tn. 3333

Bolt's
CHIAVARDINE- Marca C.788 con riparella elastica doppia dis.N.5134-5121

Numero richiesto 3.333.000

Peso delle chiavardine Tn. 2233

Marca 9 Dis. N. 3442

Numero richiesto 6.666.000

Peso delle caviglie Tn. 4200

18'1

./.

TRAVERSE -delle dimensioni di m. 2.60 x 0.24 x 0.14

Numero richiesto 883.250

Peso delle traverse Tn. 75.000.

N.B. Se la lunghezza delle rotaie sarà di m. 18 il numero delle ganasce e delle chiavarde e piastroni di giunzione, nonché i relativi pesi dovranno essere raddoppiati, mentre dovranno diminuire N. 55.550 piastre marca FSP 99 del peso di Tn. 431.

Se la lunghezza delle rotaie sarà di m. 12 il numero delle ganasce, chiavarde e piastroni di giunzione, nonché i relativi pesi dovranno essere triplicati, mentre dovranno diminuire N. 83.325 piastre marca FSP 99 del peso di Tn. 646.

Roma li 3 settembre 1945

IL C/O DEL SERVIZIO LAVORI

[Signature]

*If it is not possible to stop the
trucks in 36 months length the
machines & equipment of the company
must be exchanged in proportion*

*Should it be necessary to supply
the Republic of Germany with equipment
2.60m x 0.24m x 0.14m*

N.B. Se la lunghezza delle rotaie sarà di m. 18 il numero delle ganasce e delle chiavarde e piastroni di giunzione, nonché i relativi pesi dovranno essere raddoppiati, mentre dovranno diminuire N. 55.550 piastre marca FSP 99 del peso di Tn. 431.

Se la lunghezza delle rotaie sarà di m. 12 il numero delle ganasce, chiavarde e piastroni di giunzione, nonché i relativi pesi dovranno essere triplicati, mentre dovranno diminuire N. 83.325 piastre marca FSP 99 del peso di Tn. 646.

Roma li 3 settembre 1945

IL CPO DEL SERVIZIO LAVORI

Offmann

*If it is not possible to ship the
wheels in 36 months length the
material is accepted off the components
and it is necessary in proportion*

*Shoulder at the same time as the supply
the the following are suggested
2.60m x 0.2m x 0.1m
160 553 250
Adopt 750000*

TRACK MATERIALS.Details of materials required for 500 Km. of track.Rails.

- a) Type of rails American Standard Kg. 50.34 per lineal mt. 1.c.
 101.49 lbs per yard.
 Drawing No F.S. 6216
 Length of rails 36 mts.
 No of rails required 27,775
 Weight of rails 50.340 tons.

Angle Bars.

Type American Standard 4 hole (modified).
 Drawing F.S. 6217
 If standard American angle bars supplied, they must be modified as
 per drawing F.S. 6241.
 No required 55,550
 Weight of angle bars 769 tons.

Bolts for angle bars with nuts and lock washers.

Bolts and nuts American Standard lockwashers type Rd. 1
 Drawing F.S. 6246 and F.S. 5121.
 No required 111,100
 Weight of bolts and nuts 101 tons.

Tie plates.

Type F.S.P. 219
 Drawing No F.S. 5063
 No required 27,775
 Weight of tie plates 585 tons.

Rail Clips.

New Type.
 Drawing F.S. 6239
 No required 3,330,000
 Weight of clips 333 tons.

Lag screws. Type No 9.

Drawing F.S. 3442.
 No required 6,666,000
 Weight of lag screws 4,199 tons.

No required 55,550
Weight of angle bars 769 tons.

Bolts for angle bars with nuts and lock washers.

Bolts and nuts American Standard lockwashers type Rd. 1
Drawing F.S. 6246 and F.S. 5121.
No required 111,100
Weight of bolts and nuts 101 tons.

Tie plates.

Type F.S.P. 219
Drawing No F.S. 5063
No required 27,775
Weight of tie plates 535 tons.

Rail clips.

New Type.
Drawing F.S. 6239
No required 3,330,000
Weight of clips 3,333 tons.

Lag screws. Type No 9.

Drawing F.S. 3442.
No required 6,656,000
Weight of lag screws 4,199 tons.

Tie plates.

Type F.S.P. 99B.
Drawing No F.S. 4268
No required 1,610,950
Weight of tie plates 12,662 tons.

12-0

Feb 91

- 2 -

Bolts, nuts and lock washres.

Type C788 and RD.1.
Drawing F.S. 5134 and F.S. 5121.
No required 3,333,000
Weight of bolts and nuts 1772 tons.

If the rails are not supplied in 36 mts lengths the numbers of the fittings must be varied in the same proportion, as the length of the rails, i.e. if rails are 18 mts fittings must be doubled.

Ties.

If it is decided to supply ties the following are required:

Size 2.60 mts x 0.24 mts x 0.14 mts.
No required 883,250
Weight 75,000 tons.

Should the material be ordered from England 100 lb British Standard specification rails, fishplates and bolts should be supplied.

The fishplates must be modified as per drawing F.S. 6241.
Drawing F.S. 6240 shows the method of assembly.

5 AHS/ef

TRANSPORTATION SUB-COMMISSION, A.C. ,
 (RAIL DIVISION)
 c/o. Transportation (Br) Main,
 C.M.F.

23rd August 45

Tel : 843239

Ref : AC/Tn/75/4/C.E.

SUBJECT : Screening report
 Fabbisogno materiali.

TO : Chief Rail Division
 Mr R.P. Moss .

1. Further to my AC/Tn/59/36/C.E. of 11th August .
2. Herewith estimated cost of materials requested.
3. It must be borne in mind, that this is a very approximate estimate due to it being impossible in the time available to obtain current market prices.

4. Estimates :

	<u>1945</u>	<u>1946</u>
Raw material	12.500.000	21.000.000
Track material	8.650.000	
Mechanical equipment for Works Section	600.000	
	<u>21.750.000</u>	<u>21.000.000</u>
	=====	=====

5. All prices in U.S. dollars.

6. Coal is not included .

A.H. STREET, Lt. Col.

Price	1945	Quantity	Cost	1944	Quantity	Cost
1 Fuel	60	2.050	123.000	4000	210.000	
2 Lubricants	200	125-	27.500	225-	49.500	
4 Quavel Del	40	1315-	5.260	2630	105.200	
5 Oil Gun	50	15.486	774.300	25.852	1292.600	
6 Steel	80	61.032	4.882.560	104.226	8.338.080	
7 Lead	140	2013.6	281.900	3.099	433.860	
8 Tin	1400	20.8	291.200	31.6	44.240	
9 Zinc	160	110.7	17.910	108	17.280	
10 Bronze	400	2.11	84.400	269.5	107.800	
11 Copper	600	4595.8	2.757.480	7465.8	2.986.320	
12 Aluminum	500	465.2	232.700	520.3	240.150	
14 Brass	300	18.6	5.780	443	12.390	
15 Sheet Steel	250	9.2	2.300	20.3	50.750	
16 Hydraulic Fluid	300	592.3	177.600	1284.8	385.440	
19 Fuel Oil	1000	3.9	3.900	87.3	873.000	
21 Fuel Oil	600	389.4	233.640	648.2	388.920	
22 Sulfate	200	62	12.400	43	8.600	
27 Asbestos	500	85-	42.500	130	65.000	
30 Barbed Wire	600	23	13.800	66	39.600	
31 Barbed Wire	150	200	30.000	400	60.000	
32 Regularly Work	250	26.1	6.500	30	12.500	
33 Regularly Work	300	156-	46.800	211	63.300	
34 Regularly Work	250	21	5.250	36.5	9.120	
35 Regularly Work	300	605-	181.500	1360	348.000	
36 Regularly Work	300	10-	30.400	30	948.00	
37 Regularly Work	300	300	17.500	600	30.000	
38 Regularly Work	300	200	80.000	100	40.000	
39 Regularly Work	300	10-	10.287.380	17356.450		
40 Regularly Work	300	10-	2057.480	20%	3471.290	
41 Regularly Work	300	10-	12334860	20827740		
42 Regularly Work	300	10-	12.500.000	21.000.000		
43 Regularly Work	300	10-	7.200.000	20%	1430.000	
44 Regularly Work	300	10-	7.200.000	20%	1430.000	
45 Regularly Work	300	10-	7.200.000	20%	1430.000	
46 Regularly Work	300	10-	7.200.000	20%	1430.000	
47 Regularly Work	300	10-	7.200.000	20%	1430.000	
48 Regularly Work	300	10-	7.200.000	20%	1430.000	
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66 Regularly Work	300	10-	7.200.000	20%	1430.000	
67 Regularly Work	300	10-	7.200.000	20%	1430.000	
68 Regularly Work	300	10-	7.200.000	20%	1430.000	
69 Regularly Work	300	10-	7.200.000	20%	1430.000	
70 Regularly Work	300	10-	7.200.000	20%	1430.000	
71 Regularly Work	300	10-	7.200.000	20%	1430.000	
72 Regularly Work	300	10-	7.200.000	20%	1430.000	
73 Regularly Work	300	10-	7.200.000	20%	1430.000	
74 Regularly Work	300	10-	7.200.000	20%	1430.000	
75 Regularly Work	300	10-	7.200.000	20%	1430.000	
76 Regularly Work	300	10-	7.200.000	20%	1430.000	
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94 Regularly Work	300	10-	7.200.000	20%	1430.000	
95 Regularly Work	300	10-	7.200.000	20%	1430.000	
96 Regularly Work	300	10-	7.200.000	20%	1430.000	
97 Regularly Work	300	10-	7.200.000	20%	1430.000	
98 Regularly Work	300	10-	7.200.000	20%	1430.000	
99 Regularly Work	300	10-	7.200.000	20%	1430.000	
100 Regularly Work	300	10-	7.200.000	20%	1430.000	

21K... 600	389.4	233,640	648.2	388,920
23 June 2000	62	12,400	43	8,600
27 August 500	85	42,500	130	65,000
30 September 600	23	13,800	66	39,600
31 December 125	200	30,000	400	60,000
21 January 200	261	6,500	50	12,500
31 March 300	156	46,800	211	63,300
30 April 200	21	5,250	36.5	9,120
31 May 300	600	181,500	1360	348,000
31 June 300	10	30,400	30	9,4800
31 July 300	350	17,500	600	30,000
31 August 200	200	80,000	100	44,000
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4

TRACK MATERIAL REQUIRED FOR
1945 PROGRAMME .

Complete track including rails, fastenings etc.
but excluding ties.

Weight of rails 50.344 Kgs.per meter = 500 Kms.

2.

1. Attached is list of track and maintenance equipment, in addition to list of raw and semi worked materials.
2. These being for use in the first stage of reconstruction should be included in the 1945 Programme, as they are of an urgent nature.
3. Any of these items that were shown on "FABBISOGNO MATERIALI" 1945 and 1946 have been deleted.
4. If any of these items can be supplied from existing Army stocks, it will save both shipping space and time.

TRACK MAINTENANCE EQUIPMENT REQUIREMENTS
FOR TRACK EQUIPMENT PROGRAMME.

<u>Item.</u>	<u>Or similar to No shown on USA Army catalog.</u>	<u>Number required.</u>
Breakers paving pneumatic 100 lb class	66-2435=300=000	30
ditto 55 lb class		30
In addition spare parts for M/CS supplied for normal maintenance for 12 months.	66-2435=300=000	
Bits Pointed for breakers Paving (100 lb) class		200
Bits Chisel pointed ditto ditto		200
for type of M/CS supplied		
Bits pointed for breakers Paving (55lb class)		200
Bits Chisel pointed ditto ditto		200
for type of mls supplied.		
Bucking tools Pneumatic (Holder up) for use with each type of hammers pneumatic rivetting supplied		100
In addition spare parts for 12 months maintenance.		
Busters rivet pneumatic "Red Devil" type capacity up to cutting heads off 1" dia rivets In addition spare parts for 12 months maintenance.		30
Bits (Chisel) assorted for type of Busters supplied.		300
Compressors Air, capacity 500 C.M.F. complete with all accessories, tools and servicing equipment. 66-3250=500=000		30
ditto capacity 210 C.M.F.		30
In addition spare parts to the scale necessary for the 12 months maintenance of the make and type of M/CS supplied	66-3250=210=300	
Cranes crawler mounted revolving (swing) 7 to 10 tons (class IV type) Diesel driven with tools		

Bits Chiesel pointed ditto	200
for type of M/CS supplied	
Bits pointed for breakers Paving (55lb class)	200
Bits Chiesel pointed ditto	200
for type of mls supplied.	
Bucking tools Pneumatic (Holder up) for use with each type of hammers pneumatic rivetting supplied	100
In addition spare parts for 12 months maintenance.	
Busters rivet pneumatic "Red Devil" type capacity up to cutting heads off 1" dia rivets In addition spare parts for 12 months maintenance.	30
Bits (Chisel) assorted for type of Busters supplied.	300
Compressors Air, capacity 500 C.M.F. complete with all accessories, tools and servicing equipment. 66=3250=500=000	30
ditto capacity 210 C.M.F.	30
In addition spare parts to the scale necessary for the 12 months maintenance of the make and type of M/CS supplied	66=3250=210=300
Cranes crawler mounted revolving (swing) 7 to 10 tons. (class IV type) Diesel driven with tools	10
Cranes crawler mounted as above (class IV) capacity 1½ to 2, cubyd (with tools).	5
In addition such spares parts as are necessary for 12 months maintenance service.	78=2813=001=000

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18.5

Item.	Or similar to No shown on USA Army catalog.	Number required
Drills pneumatic portable rock 35 lb class In addition spare parts for M/CS supplied for normal maintenance for 12 months.	66-4575-350-000	50
Digger clay Pneumatic	66-4395-570-500	10
Dump trucks (Automobile Murrill type) capacity 1 cube yard.		24
1bs each Electrodes Welding steel mild general purpose. 5/32 x 14 " 1/8 x 14 " 3/16 x 14 " 1/4 x 14 "	46-3772-150-20	
Hammers pneumatic rivetting up to capacity of 1" rivets ingold rand type.	40-5488-050-500	100
Sets of assorted snap for 1/2" to 1" rivets for above M/CS supplied.		120
In addition spare parts for maintenance, of the M/CS supplied, for 12 months.		
Hammers pneumatic or steam double acting 7.000 lbs complete with all necessary hoses, fittings, guides, etc.	66-5345-7	5
Hammers pneumatic or steam, single acting 1020 lbs complete with all necessary hoses, fittings wire rope guides etc.	66-5345-1	5
In addition spare parts for 12 months maintenance of the M/CS supplied.		
Hoist winch builders type gasoline or Diesel driven maximum lift 50 feet capacity 1 ton each with the necessary steel wire rope.		6
ditto maximum lift 100 ft capacity 1/2 ton In addition 2 spare S.W. ropes for each type		10

1/8 x 14 "		
3/16 x 14 "		
1/4 x 14 "		
Hammers pneumatic rivetting up to capacity of 1" rivets ingold rand type.	46=3772=150=20	
Sets of assorted snap for 1/2" to 1" rivets for above M/CS supplied.	40=5488=050=500	100
In addition spare parts for maintenance, of the M/CS supplied, for 12 months.		120
Hammers pneumatic or steam double acting 7,000 lbs complete with all necessary hoses, fittings, guides, etc.	66=5345=7	5
Hammers pneumatic or steam, single activating 1020 lbs complete with all necessary hoses, fittings wire rope guides etc.	66=5345=1	5
In addition spare parts for 12 months maintenance of the M/CS supplied.		
Hoist winch builders type gasoline or Diesel driven maximum lift 60 feet capacity 1 ton each with the necessary steel wire rope.		6
ditto maximum lift 100 ft capacity 1/2 ton		10
In addition 2 spare S.W. ropes for each type supplied.		
Lenght hose pneumatic braided x 25 ft		150
" " " x 50 ft 38=5464=0704		100
each complete with fastenings to suit, concrete breakers, buster rivet, drill rock pneumatic, and diggers clay pneumatic, supplied against these items requested.		18

Item.
Or similar to No
shown on USA Army
catalog.

Number
required.

Lengths Hose 4" Suction x 15 ft
w/foot valve and strainer.

6

Length Hose 4" deliver to suit pumps
4" centrifugal supplied.

6

Jacks universal or bridge

41-4966=500=150

24

" hydraulic 8 tons

57-4904=500=500

12

" " 20 tons

41-4944=300=15

10

" duff norton 35 tons

41-4597=102

6

In addition hydraulic fluid for type
supplied for 1 years Service. Spare
parts for 12 months maintenance.

Mixers concrete 14 cu ft gasoline or
Diesel driven complete with tools
and all accessories.

15

78-5785=140=800

5

ditto 1 cube yard

In addition for the mixers supplied
suitable spare parts, valves, s.wire
rope etc. for 12 months maintenance.

Pumps diaphragm gasoline Eng. driven
100 G.P.M. at 10 ft.

10

11-5620=410=500

In addition spare diaphragms 144 in
number for M/C supplied.

Pumps centrifugal 4" gasoline or Diesel
Eng. Driver, 4" discharge 400 G.P.M. 120ft 11-4773=430=200

5

In addition spare parts necessary for
12 months maintenance of the above pumps
to be supplied.

Pile driving frames, 60ft high, complete
with steam winch, boiler, 2 tons drop ham-
mer, all the necessary ropes connections,
tools and fittings.

10

Diesel driven complete with tools and all accessories.

15

78=5785=140=800

ditto 1 cube yard

5

In addition for the mixers supplied suitable spare parts, valves, s.wire rope etc. for 12 months maintenance.

P.

Pumps diaphragm gasoline Eng. driven 100 G.P.M. at 10 ft.

10

11=5620=410=500

In addition spare diaphragms 144 in number for W/C supplied.

Pumps centrifugal 4" gasoline or Diesel Eng. Driver, 4" discharge 400 G.P.M. 120ft 11=4773=430=200

5

In addition spare parts necessary for 12 months maintenance of the above pumps to be supplied.

Pile driving frames, 60ft high, complete with steam winch, boiler, 2 tons drop hammer, all the necessary ropes connections, tools and fittings.

10

B. Rollers road or diesel Eng. driver 5 to 8 tons.

3

78=7065=050=000

1673

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<u>Item.</u>	<u>Or similar to No shown on U.S.A. Army catalog.</u>	<u>Number required.</u>
S. Shovels power & cube yard, crawler	78-7585-300	5
ditto 1 cube yard		5
Each machine to be supplied complete with :		
a) Forward crowd equipment.		
b) Dragline equipment		
c) Crane equipment		
d) Back actor equipment.		
In addition, set of tools and servicing equipment, and spare parts for 12 months maintenance of M/CS supplied.		
T. Spades Digger pneumatic clay	60-8065-400-500	10
Tractors, crawler, Diesel Eng. driven 70/90 BHP. Standard w/Angledozer tilting.	78-8168-020-000	2
Ditto 55/65 HP dozer	78-S 260	3
Ditto 110/140 BHP complete with hyster winch	98-9875-550-800	2
Ditto 70/90 HP Bull dozer	78- S 435	3
In addition the necessary tools and servicing equipment. Also the spare parts necessary for 12 months maintenance of the M/CS supplied.		
W. Sets cutting and welding equipment oxy acetylene complete	970-02	20
Ditto general purpose underwater oxy are cutting complete.	970-03	5

In addition spare pips (Nozzels) both

T.	Shades Digger pneumatic clay	60=8065=400=500	10
	Tractors, crawler, Diesel Eng. driven 70/90 BHP. Standard w/angledozer tilting.	78=8168=020=000	2
	Ditto 55/65 HP dozer	78=S 260	3
	Ditto 110/140 BHP complete with hyster winch	98=9875=550=800	2
	Ditto 70/90 HP Bull dozer	78= S 435	3
	In addition the necessary tools ens servicing equipment. Also the spare parts necessary for 12 months maintenance of the M/CS supplied.		
W.	Sets cutting and welding equipment oxy acetylene complete	970=02	20
	Ditto general purpose underwater oxy are cutting complete.	970=03	5

In addition spare tips (Nozzels) both
cutting and welding for 12 months.

16

MEMORANDUM

Tel. 843239

Ref.: AC/MA/15/2 C.E.

12 August 45

SUBJECT: Track and Maintenance Equipment Requirements for Track Equipment Programme.

1. These being for use in the first stage of reconstruction, should be included in the 1945 Programme, as they are of an urgent nature.
2. This list has been screened and appears to be reasonable having regard to the amount of reconstruction work being undertaken.
3. Any of these items that were shown on "FABBISOGNO MATERIALI" 1945 and 1946 have been deleted.
4. If any of these items can be supplied from existing Army Stocks, it will save both shipping space and time.

Number Required. Item Or similar to number shown on US Army Catalog.

Breakers paving pneumatic 100lb class 55lb class

In addition, spare parts for ~~mls~~ *mls* supplied for normal maintenance for 12 months.

66-2435-300-000

Bits Pointed for breakers Paving (100lb) class

Bits-Chisel pointed ditto " for type of mls supplied.

Bits Pointed for breakers Paving (55 lb) class

Bits-Chisel pointed ditto " for type of mls supplied.

Backing Tools Pneumatic (Holder up) for use with each type of Hammers Pneumatic Blasting supplied.

In addition spare parts for 12 months maintenance.

having regard to the amount of reconstruction work being undertaken.

3. Any of these items that were shown on "PABISOGNO MATERIALI" 1945 and 1956 have been deleted.

4. If any of these items can be supplied from existing Army Stocks, it will save both shipping space and time.

<u>Number Required.</u>	<u>Item</u>	<u>Or similar to number shown on US Army Catalog.</u>
12,000 B 30	Breakers paving pneumatic 100lb class	66-2435-300-000
30	- ditto	
	In addition, spare parts for M42 ^{M42A1} supplied for normal maintenance for 12 months.	
200	Bits Pointed for breakers paving (100lb)	66-2435-300-000
200	Bits-Chisel pointed ditto " class	
200	for type of mls supplied.	
200	Bits Pointed for breakers paving (55 lb)	
200	Bits-Chisel pointed ditto " class	
	for type of mls supplied.	
10,000 100	Bucking Tools Pneumatic (Holder up) for use with each type of Hammers Pneumatic Rivetting supplied.	
	In addition spare parts for 12 months maintenance.	
6,000 30	Busters rivet pneumatic-"Red Devil" type, capacity up to cutting heads off 1" dia rivets.	

Number
required.

Item

Or similar
item number
shown on US
Army Catalog.

In addition spare parts for 12 months maintenance.

300	Bits (Chisel) assorted for type of Busters supplied.	66-3250-210-300
C.30	Compressores Air, capacity 500 C.M.P. complete with all-accessories, tools and servicing equipment. 66-3250-500-000	
30	ditto capacity 210 C.M.P.	
120,000	In addition spare parts to the scale necessary for the 12 months maintenance of the make and type of m/Cs supplied	
10	Cranes crawler mounted Revolving (swing) 7 to 10 tons. (class IV type) Diesel driven (with tools).	
45,000 15,000	Cranes crawler mounted as above, (class IV) Capacity 1 1/2 to 2, cubyd (with tools).	78-2813-001-000
50,000	In addition such spare parts as are necessary for 12 months maintenance service.	
5,000		
D.50	Drills pneumatic portable rock 35 lb class	66-4575-350-000
300	In addition spare parts for m/Cs supplied for normal maintenance for 12 months.	
10	Digger clay Pneumatic	66-4395-570-500
25	Dump trucks (Automobile Murrell type) capacity 1 cube yard.	

E.

Or similar to
item number
shown on U.S.
Army Catalog.

Number
Required.

Item

- E. 2000 1bs each Electrodes Welding steel mild
general purpose. 5/32 x 14 "
1/8 x 14 "
3/16 x 14 "
1/4 x 14 "
46-3772-150-20
- H. 100 Hammers Pneumatic Riveting-up to capacity
of 1" Rivets Ingsold Rand type.
120 Sets of Assorted snap for 1/2" + 1"
rivets for above M/Cs supplied.
40-5488-050-500
- 5 Hammers pneumatic of steam double Acting
7,000 lbs complete with all necessary hoses,
fittings, guides, etc. 66-5345-7
- 5 Hammers pneumatic or-steam, single activating
1020 lbs complete with all necessary
hoses, fittings wire roper guides, etc. 66-5345-1
- In addition spare parts for maintenance, of
the M/Cs supplied, for 12 months.
- 6 Hoist which Builders type Gasoline or Diesel
driven maximum lift 60 feet capacity 1 ton
each with the necessary steel wire rope
10 1500 ditto max: lift 100ft capacity 1 ton.
200 In addition 2 spare S.W. Ropes for each type supplied.
- 150 Lengths hose pneumatic braided x 25 ft
100 " " " " x 50 ft
each complete with fastenings to suit,
Concrete Breakers, Buster Rivet Drill Rock
Pneumatic, and diggers clay pneumatic, supplied
again these items requested.
- 6 Lengths Hose 4" Suction x 15 ft
w/ foot valve and strainer.
6 Lengths Hose 4" deliver to suit pumps
4" Centrifugal supplied.

- 5 *5000* Hammers pneumatic or steam double Acting
7,000 lbs complete with all necessary hoses,
fittings, guides, etc. 66-5345-7
- 5 *5000* Hammers pneumatic or steam, single acting
1020 lbs complete with all necessary
hoses, fittings wire roper guides, etc. 66-5345-1

In addition spare parts for 12 months
maintenance of the M/Cs supplied.

6. Hoists which Builders type Gasoline or Diesel
driven maximum lift 60 feet capacity 1 ton
each with the necessary steel wire rope
10 *1500* ditto max; lift 100ft capacity 1/2 ton.

200 In addition 2 spare S.W. Ropes for each type supplied.

150. Lengths hose pneumatic braided x 25 ft 38-5464-070+
- 100 " " " -x 50 ft
- each complete with fastenings to suit,
Concrete Breakers, Buster Rivet Drill Rock
Pneumatic, and diggers clay pneumatic, supplied
again these items requested.

- 6 Lengths Hose 4" Suction x 15 ft
- 5 w/ foot valve and strainer.
- Lengths Hose 4" deliver to suit pumps
4" Centrifugal supplied.

- J.24 Jacks Universal or-bridge
- 12 " Hydraulic 8 tons
- 10 " " -20 tons
- 6 " Duff norton 35 tons

450
300
500

41-4966-500-150
57-4904-500-500
41-4944-300-15
41-4547-11-102.

Number
required.Item

item
shown on U.S.
Army Catalog.

In addition Hydraulic fluid for type supplied for 1 years Service. Spare parts for 12 months maintenance.

M.15

Mixers concrete 14-cu-ft gasoline or diesel driven complete with tools and all accessories.
ditto 1 cube yard.

78-5785-140-800.

In addition, for the mixers supplied suitable spare parts, valves, S.wire Rope etc. for 12 months maintenance.

P. 10

Pumps diaphragm gasoline Eng. driven 100 G.P.M. at 10 ft

11-5620-410-500

In addition spare diaphragms 144 for M/C supplied.

5

Pumps centrifugal 4" gasoline or diesel Eng. driver, 4" discharge 400 G.P.M. 120 ft 11-4773-430-200

In addition spare parts necessary for 12 months maintenance of the above pumps to be supplied.

10

Pile Driving frames, 60-ft high, complete with steam which, boiler, 2 tons-drop hammer, all the-necessary ropes, connections, tools and fittings.

R.3

Rollers Road gas or diesel Eng. driver 5 to 8 tons. 78-7065-050-000

60000 8 5
10000 5

Shovels Power 1/2 cube yard, crawler ditto 1 cube yard. 78-7585-300

Each machine to be supplied complete with:-

- a) Forward crowd equipment.
- b) Dragline equipment.
- c) Crane equipment.
- d) Back actor equipment.

1638

In addition, set of tools and equipment.

P. 10 Pumps diaphragm gasoline Eng. driven
100 G.P.M. at 10 ft
In addition spare diaphragms 144 for
M/C supplied.
11-5620-410-500

5 Pumps centrifugal 4" gasoline or diesel
Eng. driver, 4" discharge 400 G.P.M. 120 ft 11-4773-430-200
In addition spare parts necessary for 12
months maintenance of the above pumps to
be supplied.

10 Pile Driving frames, 60-ft high, complete with
steam which, boiler, 2 tons-drop hammer, all
the-necessary ropes, connections, tools and
fittings.

R.3 Rollers Road gas or diesel Eng. driver 5 to
8 tons.
78-7065-050-000
Shovels Power & cube yard, crawler
ditto 1 cube yard.
78-7585-300
Each machine to be supplied complete
with:-

60000 5
10000 5

a) Forward crowd equipment.
b) Dragline equipment.
c) Crane equipment.
d) Back actor equipment.
1808
In addition, set of tools and servicing
equipment, and spare parts for 12 months
maintenance of M/Cs supplied.

10 Spades Digger pneumatic clay
68-8065-400-500.

number
required.

Items

item
shown on U.S.
Army Catalog.

T-2 Tractors, crawler, diesel Eng. driven
70/90 BHP. Standard w/ Angledozer
filling.

78-8168-020-000

3 4000 Ditto 55/65 HP Bull dozer

78- S 260

2 2500 ditto 110/140 BHP complete with
Hydrier which

78-8178-030-000

98-9875-550-800

3 Ditto 70/90 HP Bull Dozer.

78- S 435

In addition the necessary tools and
servicing equipment. Also the spare
parts necessary for 12 months maintenance
of the M/Gs supplied.

W-20

Sets cutting and welding equipment oxy,
acetylene complete

970-02

Ditto General purpose underwater oxy
arc cutting complete.

970-03

In-addition, spare tips (nozzels) both
cutting and welding for 12 months.

2
TRANSPORTATION SUB-COMMISSION, A.C.,
(RAIL DIVISION)
c/o Transportation (Br) Main, *File please*
C.M.P.

Tel : 843239

Ref : AC/Tn/59/36 C.M.P.

11 August 1945

SUBJECT : Screening Report on FABRISCONO MATERIAL.

TO : The Chief,
Rail Division,
Allied Commission.*File 91*

1. From inspection and discussion with the I.S.R. engineers responsible for the preparation of the various sections of their request for rehabilitation materials (Fabriscono Material); it is observed from their data that this request has been very carefully compiled.
2. It is not possible to accurately check all the quantities in the time available, but having regard to the amount of destruction and their programme, the quantities have been found in the main fair and reasonable.

A.H. STREET; Lt. Colonel.

Screening of FABBISOGNO MATERIALI SET 1.

Get Para

1

1.

Siderurgy: Some of the materials required for construction of the articles mentioned in this paragraph (e.g. Trucks, telephone line accessories, etc.) are repeated in other pages of the folio. Therefore the figures shown are too high. These have been rechecked by the I.S.R. and should now read Steel: 11500 tons; Zinc: 45 tons.

2.

Rails: The request for the importation of 500 Km. of complete track for all Italy is reasonable if this can be arranged. It is felt, that owing to internal industrial circumstances in Italy, that the shipping of the first 500 Km. (105000 tons) should be complete with ties (sleepers) of either timber or steel with the necessary fastenings to suit. This would enable a start to be made with the rehabilitation. Later it should be possible to obtain toes (sleepers) locally. A request has been sent to the I.S.R. asking for their guarantee that they will keep to their programme of 100 Km. (210000 Tn) of track per month.

3.

Fastenings: The difference in weight between that requested and that necessary for 300 Km. of track is explained that these are necessary for maintenance of lines now open for traffic. It should be noted that the weight of fastenings is greater in Italy than with British Military Railways - being almost double (figures obtained from I.S.R. handbook). I.S.R. have been asked to reduce their request for 1945 and 1946 by 33 per cent.

The difference between raw & finished materials appears to be high, this could possibly be checked by the industry division.

4.

5.

Cast iron for blocks and supports: This is a reasonable demand according to I.S.R. practice.

6.

Rapid steel for tools: (High speed tool steel) This is a reasonable demand.

7.

Assorted rivets: This is also a reasonable demand.

8.

Thin galvanised iron sheets: Only 12 tons asked for and seems a fair request.

9.

Wire for overhead telegraph line: This for use on line, Roma Milano and Roma Napoli. Request - fair.

10.

3. Fastenings: The difference in weight between that requested and that necessary for 300 Km. of track is explained that these are necessary for maintenance of lines now open for traffic. It should be noted that the weight of fastenings is greater in Italy than with British Military Railways being almost double (figures obtained from I.S.R. handbook 1946 by 33 per cent. The difference between raw & finished materials appears to be high, this could possibly be checked by the industry division).
4. Cast iron for blocks and supports: This is a reasonable demand according to I.S.R. practice.
5. Rapid steel for tools: (High speed tool steel) This is a reasonable demand.
6. Assorted rivets: This is also a reasonable demand.
7. Thin galvanised iron sheets: Only 12 tons asked for and seems a fair request.
8. Wire for overhead telegraph line: This for use on line, Roma Milano and Roma Napoli. Request - fair.
9. Decauville for 1945: This should be obtained from the Italian Government in the near future, when this is derequisitioned by the various Army Authorities.
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SCREENING OF FABRISOGNO MATERIALISHEET 2

Page. Para.

- 1 11 This refers to water piping required for repairs to station water systems, acqueducts etc.. This figure was arrived at on estimates obtained from two surveys of sites. A period of one year covering both surveys.
- 12 This refers to cable used to keep signal wire in tension. It appears to be a fair demand.
- 13U Used for signals overhead cable etc. A fair request.
- 14 Water columns used for supplying locos with water and replacing those damaged or destroyed.
- 2 15 This for use with the telegraph and signals department. The method of arriving at this figure was checked and the estimate is fair.
- 2 The I.S.R. now wish to revise this figure to 1500 Km (i.e. an increase of 1000 Km.) in order to incorporate Torino Milano Verona Venezia into their existent scheme. Requirements now would be; - Copper 100 tons, Cadmium 1 ton
- 3 To fit in with the telephone and signals programme and is a fair request.
- 4-5-6-7 All as for Para 3 above.
- 8 A fair estimate considering the amount of water piping demand -ed.
- 3 1 A reasonable demand.
- 2 A reasonable demand.
- 3 A reasonable demand.
- 4 A reasonable demand.
- 5 The method of arriving at this figure was checked and adheres to the electro mechanical programme.
- 6 As for para 5 above.
- 7 A reasonable demand.
- 8 and 9 These refer to water tanks and portable watertanks required at stations to replace those damaged and destroyed.

increase of 1000 Km.) in order to incorporate Torino Milano Verona Venezia into their existant scheme. Requirements now would be:- Copper 100 tons, Cadmium 1 ton

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4-5-6-7 All as for Para 3 above.

8 A fair estimate considering the amount of water piping demand -ed.

3 1 A reasonable demand.

2 A reasonable demand.

3 A reasonable demand.

4 A reasonable demand.

5 The method of arriving at this figure was checked and adheres to the electro mechanical programme.

6 As for para 5 above.

7 A reasonable demand.

8 and 9 These refer to water tanks and portable watertanks required at stations to replace those damaged and destroyed.

4 1 These refer to loco turntables. The demand seems fair and reasonable.

2 These have already been indented for on a supplementary indent dated 8 August 1945.

3 A reasonable demand.

4 These refer to Freight lifts and elevators used in stations. The figure of 35 being required seemed excessive but on check with the I/S/R/ proved satisfactory. These to replace those destroyed or damaged.

5 Workshop overLead cranes, reasonable request.

Rail, loading for dump to Cars

185

Page. Para.

4 B1 These are the type used to weigh freight on rail. 17 are requested and are to replace bombed ones at Verona -Padua-Bologna.etc.

B2 As for para B1.

B3 As for para B1.

5 1 These are domestic pumps for Casa Cantonieri etc; and to replace bombed and damaged ones. The system of arriving at the number requested was checked.

2 Pumps for supplying water to cisterns and reservoirs at stations. A fair estimate.

3 as for para 2 above.

4 As for para 2 above.

5 Fire fighting appliances and a reasonable estimate of the materials required.

6 A supplementary indent for these has already gone in on 8 August 1945.

7 Please see supplementary indent of 8 August 1945.

8 ~~As for para 7.~~ Small shunting locos, reasonable.

9 As for para 7.

10 As for para 7.

11 These are hand driven augers (earth), and should be available from army sources.

12 This refers to valves for water systems and is a reasonable estimate considering the amount of piping being used in the programme.

5bis 1-2 - 3-4-5-6 The items in these paras have been checked over with the I.S.R., and though no exact figure could be arrived at, the figures shown on the folio are conservative in view of the fact that many stations are without lights of any kind at present.

6 1-19 Note:- It is the intention of the I.S.R. to re-institute their original signalling system on the Napoli-Roma-Firenze-Bologna-Milano lines; This was a 3000 lever system. The items requested have on page 6 are indicated for on that

- 4 As for para 2 above.
- 5 Fire fighting appliances and a reasonable estimate of the materials required.
- 6 A supplementary indent for these has already gone in on 8 August 1945.
- 7 Please see supplementary indent of 8 August 1945.
- 8 ~~xxxxxxx~~ Small shunting locos, reasonable.
- 9 As for para 7.
- 10 As for para 7.
- 11 These are hand driven augers (earth), and should be available from army sources.
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- 6 1-19 Note:- It is the intention of the I.S.R. to re-institute their original signalling system on the Napoli-Roma-Firenze-Bologna-Milano lines; This was a 3000 lever system. The items requested here on page 6 are indented for on that understanding together with the knowledge that salvaged material is to be had.
- 6bis 1-10 This again depends on the 3000 lever system shown on page 6 paras 1-19.
- 7 1-2 These have already been indented for on a supplementary indent dated 8 August 1945.

SCHEMATIC OF FABBISOGNO MATERIALISHEET 4

- Page. Para.
- 9 1-12 For rehabilitation of Pontassieve Workshops, reasonable demand.
These all to replace motor dynamic groups destroyed. Considered a fair request on the evidence shown.
- 9bis 6 For use in conjunction with the above.
- 7 These batteries to replace stocks consumed and destroyed during the campaign. Stocks books were inspected. Note:- the lead asked for under this heading must be pure i.e. suitable for use in batteries.
- 8-17 These requests are intended to cover the telephone, telegraph and signals programme; -Roma- Pisa-Parma-Milano Bologna-Firenze-Orte-Falconara.
Note:-The demands for primary and secondary cable are for repairs only to the Orte-Firenze-Bologna-Milano lines. The method of arriving at the figures of materials requested for is satisfactory.
- 9 9bis 18-20 These also depend upon Paras 8-17 shown above.
- 9bis (cont) POWER PLANTS AND SUB-STATIONS.
- 1 For use at SUVIANA between Florence and Bologna, and to replace pre-war installation destroyed during the war. This was the only power station used by the I.S.R. in Mid Italy.
- 2 Two of these for use at SUVIANA in conjunction with the above para 1. The other two for use north of SUVIANA for current conversion.
- 3 To replace 25 transformers destroyed on lines Milano-Piacenza Milano-Voghera Falconara-Orte Bologna-Firenze.
- 4 Transformers for lighting stations etc.;- auxiliary services;
- 5 For use with the 25 transformers mentioned in para 3.
- 6 Outside switches for sub-stations.
- 7 As for para 6.
- 8 For use on contact line.
- 9 This refers to all feeding apparatus to live line;-a.g. switches - resistances - relays

- For use at SUVLANA between Florence and Bologna, and to replace pre-war installation destroyed during the war. This was the only power station used by the I.S.R. in Mid Italy.
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- 4 Transformers for lighting stations etc.;- auxiliary service;
- 5 For use with the 25 transformers mentioned in para 3.
- 6 Outside switches for sub-stations.
- 7 As for para 6.
- 8 For use on contact line.
- 9 This refers to all feeding apparatus to live line;-e.g. switches - resistances - relay switches - Measuring apparatus etc.
- 10 Condensers.
- 11 Conductors - insulators etc. for use at sub-stations.
- 12 Girders-frames-trusses-beams for use at sub-stations shown in para 3.
- 13 The figure shown here refers to cubic metre damage to sub stations etc and the estimate is fair on evidence shown.

SHEET 5

SCREENING OF FABBISOGNO MATERIALI

Page. Para.

9(cont)

HIGH TENSION LINES.

For the purpose of calculating requirements under this heading the I.S.R. consider 500 kilometres as being completely destroyed. The supports mentioned in this para refer to steel pylons the sizes differ according to location and current.

2-3 These for use on high tension line.

4 These refer To suspension appliances, clamps etc.

9(cont)

Overhead CONDUITS.

This should really read as Contact Line and is intended to

cover 400kilometre run

Paras 2-5 are materials required to make this contact line.

BRICKS AND BUILDING MATERIALS.

The quantities for the above were arrived from the reports sent in by the Capo Compartementi.

The figures, as far as can be ascertained, are reasonable according to those reports.

The coal asked for is equivalent to the requirements necessary for the manufacture of the items.

11

VARIOUS ITEMS

These refer to inspection cars for use in the various compartments:-

77 are requested of the motor cycle engine type approx (5 H/P) These would work out at five per compartment with a few in reserve.

Two 45/60 H.P. are requested these are for light shunting. These requests seem fair and reasonable.

These refer to luggage and merchandise carriers, and to replace part of those destroyed.

These are all small requests and are self explanatory.

4-8 As for 4-3 above.

9-14 As for 4-3 above.

16-17 These refer to heavy lorries etc, and it is considered that the I/S/R would be advised better if they were asked to purchase these from a manufacturer in the north of Italy.

SPB/em

MEMORANDUM

TO : Major Gill C.E.
 Mechanical Equipment for I.S.R.
 Civil Engineering Branch 1945.

Sub : Materials required for Reconstruction
 Programme 1945 - 1946.

Ref-75/11/C.E.

5th August 45

1. Herewith list of Plant required by the I.S.R.

2. These being for use in the first stage of reconstruction should be included in the 1945 programme as they are of an urgent nature.

3. This list has been screened and appears to be reasonable with regard to the amount of reconstruction work being undertaken.

4. Any of these items that were shown on Taboisano material 1945, have been deleted.

5. If any of these items can be supplied from existing Army stocks it will both save shipping space and time.

No 15	Mixers concrete	1 yard	Diesel driven (or gasolir
No 5	"	1 yard	) each complete with tools.
No 20	Sets of spare replacement parts for 12 months maintenance, for the concrete mixers supplied.		
No 6	Hoists	1 ton capacity.	
No 6	Hoists	1 ton capacity.	
	spare wire cable for each of above	120 feet.	
No 24	Dump car (hurhill automobile type)	1 cubyd.	
No 20	Oxygen - Acetylene cutting outfits complete.		
No 20	"	welding outfits complete.	
No 10	Cranes creeper track slewing	5 tons.	
No 5	Cranes Creeper track slewing	7 tons.	
No 12	Jacks Hydraulic	5 tons.	
No 8	"	10 tons.	
No 6	"	20 tons.	

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4. Any of these items that were shown on Fabbisano materials 1945, have been deleted.

5. If any of these items can be supplied from existing Army socks it will both save shipping space and time.

Nº 15	Mixers concrete $\frac{1}{2}$ yard) Diesel driven (or gasolin
Nº 5	" " 1 yard) each complete with tools.
Nº 20	Sets of spare replacement parts for 12 months maintenance, for the concrete mixers supplied.
Nº 6	Hoists 1 ton capacity.
Nº 6	Hoists $\frac{1}{2}$ ton capacity.
	spare wire cable for each of above 120 feet.
Nº 24	Dump car (Murrill automobile type) 1 cubyd.
Nº 20	Oxygen - Acetylene cutting outfits complete.
Nº 20	" " welding outfits complete.
Nº 10	Cranes creeper track slewing 5 tons.
Nº 5	Cranes Creeper track slewing 7 tons.
Nº 12	Jacks Hydraulic 5 tons.
Nº 8	" " 10 tons.
Nº 6	" " 20 tons.

1631

- Nº 5 Caterpillar Tractors, Size D6 or D7 Fitted with Angledoser Equipment Complete.
- Nº 5 Caterpillar Tractors, Size D6 Fitted with Angledoser Equipment and Hyeter Winches Complete.
- Nº 10 Sets Tools and Servicing Equipment for the above Caterpillar Tractors. Spare parts, etc. necessary to scale for 12 months for maintenance of Caterpillar Tractors supplied.
- Nº 10 Mechanical shovel Excavators, Tracked ok to work in tunnels either Bucyrus or Ray City type capacity, each machine to be supplied complete with:
- a) Forward Crowd Shovel Equipment,
 - b) Dragline Equipment,
 - c) Crane Equipment,
 - d) Each other.
- Nº 10 Sets tools and Servicing Equipment for Mechanical Shovel Excavators of type supplied.
- Spare parts, etc. necessary to scale for 12 months for maintenance, of Mechanical Shovel Excavators and Equipment supplied.
- Nº 30 Air Compressors, capacity 500 cubic feet free air per minute complete with all accessories, tools and servicing equipment.
- Nº 30 Air Compressors, capacity 250 cubic feet free air per minute complete with all accessories tools and servicing equipment.
- Spare parts, etc. to scale necessary for 12 months maintenance of six Air Compressors supplied.
- Ft. Run. 15.000 - Pneumatic Hose, to size suitable to air compressors supplied, to be supplied in lengths of 50, feet together with all necessary couplings, etc.
- Nº 120 Pneumatic Concrete Breakers, large size, complete with spare parts for normal maintenance.
- Nº 1000 Bits for Concrete Breakers, Pointed.
- Nº 1000 Bits for Concrete Breakers, Chisel Pointed.
- Nº 240 Pneumatic Concrete Breakers, Small size, complete with spare parts for normal maintenance.
- Nº 2000 Bits for Concrete Breakers, Pointed.
- Nº 2000 Bits for Concrete Breakers, Chisel Pointed.
- Nº 500 Bits for Concrete Breakers, Clay Spades.
- Nº 120 Pneumatic Rivetting Hammers, Medium size, complete with spares and spare parts for normal maintenance.

spare parts, etc. necessary to scale for 12 months for maintenance, of Mechanical Shovel Excavators and Equipment supplied

N° 30 Air Compressors, capacity 500 cubic feet free air per minute complete with all accessories, tools and servicing equipment

N° 30 Air Compressors, capacity 250 cubic feet free air per minute complete with all accessories, tools and servicing equipment

Spare parts, etc. to scale necessary for 1 months maintenance of six Air Compressors supplied.

Ft. Run. 15,000 - Pneumatic Hose, to size suitable to air compressors supplied, to be supplied in lengths of 50, feet together with all necessary couplings, etc.

N° 120 Pneumatic Concrete Breakers, Large Size, complete with spare parts for normal maintenance.

N° 1000 Bits for Concrete Breakers, Pointed.

N° 1000 Bits for Concrete Breakers, Chisel Pointed.

N° 240 Pneumatic Concrete Breakers, Small Size, complete with spare parts for normal maintenance.

N° 2000 Bits for Concrete Breakers, Pointed.

N° 2000 Bits for Concrete Breakers, Chisel Pointed.

N° 500 Bits for Concrete Breakers, Clay Spades.

N° 120 Pneumatic Rivetting Hammers, Medium Size, complete with spare parts and spare parts for normal maintenance.

N° 120 Pneumatic Rivetting Hammers, Large Size, complete with spare parts and parts for normal maintenance. ^{15,30}

N° 120 Pneumatic Holders Up, Large size, complete with spare parts for normal maintenance.

N° 120 Pneumatic Holders Up, Medium size, complete with spare parts for normal maintenance.

N° 10 Pile Driving Frames, 20 mts high, complete with steam winches, boilers, 2 tons drop hammers and all necessary ropes, connections and fittings.

- 3 -

- Nº 5 Single Acting, Steam Pile Driving Hammers, Size 3 tons net weight, complete with all necessary hoses, fittings, guides, at
- Nº 5 Double Acting Pile Driving Hammers (Steam or Compressed Air), Size 2 tons net weight, complete with all necessary hoses, fittings, guides, etc.
- Nº 10 Pumps, diaphragm contractors 4" - 12 ft Suction Gasoline or Diesel driven, complete with Suction hose, foot valve & delivery hose.
- Nº 5 Pumps centrifugal, 4" x 12 ft Suction Diesel Driven, complete with Suction and delivery hose, foot valve, Tools, etc.
- for 10 Pumps. 12 months spare parts for 4" diaphragm pumps including diaphragms.
- for 5 Pumps. 4" Centrifugal. 12 months spare parts.

Inter office memo.

Tn.A.4/69.

Subject : I.S.R. requests for railway reconstruction material 1945/46- Civil Engineering materials.

TO : Tn.2.

4 AUG' 45.

1. In scrutinizing the above requisition, it is possible only to carry out the most superficial examination.

To do more would require a close and extensive study of the economy and industrial conditions of Italy beyond the capacity of this branch. Please therefore accept what follows in that light.

2. Comments are given below on the main items required for the reconstruction of way and works:-

a) Track materials.

In the explanatory notes, it is stated that it will be necessary to import 500 kms. of complete track. In the demand for raw material, pig iron is requested for rolling 600 kms. of rail. Thus, during the 18 months under review, a supply of 800 kms. of track is requested in one form or another. To carry out the reconstruction programme, this is not an unreasonable demand, but I doubt the capacity of the I.S.R. to organize a relaying programme of this magnitude at the present time. There is nothing in the list concerning sleepers, and it is thought that 1,000,000 sleepers will have to be provided at the same time as the rail if the programme is to be carried out.

I suggest therefore, that the I.S.R. be asked to guarantee that they can undertake the whole of the relaying in the time, and that if this is so, steps should be taken to ensure the provision of sleepers to match the rail delivery, either from internal sources or by importing.

b) Rail fastenings.

The rail fastenings ordered appear to be approximately three times that necessary to match the rail ordered. I see no reason for this so far as I am aware there is no stock of rail and sleepers in this country rendered useless by lack of fastenings.

3. Bridging.

In the whole period, 38,000 tons of raw material are requested for the manufacture of metal truss bridges. This will correspond to 20,000 lineal feet of bridging. Again, whilst there is no doubt that this amount of bridging is necessary for the permanent rehabilitation of the railways outlined in the plan, it is extremely doubtful whether the I.S.R. are capable of fabricating and erecting the bridges in the time. If the time element is unimportant, then the figure is reasonable. 2,000 lin. metres of joists are requested for temporary bridging. This is reasonable.

4. Bricks and building materials.

The request for bricks and cement appear to be excessive for essential works, though on the basis of permanent reconstruction of all building

There is nothing in the list concerning sleepers, and it is thought that 1,000,000 sleepers will have to be provided at the same time as the rail if the programme is to be carried out.

I suggest therefore, that the I.S.R. be asked to guarantee that they can undertake the whole of the relaying in the time, and that if this is so, steps should be taken to ensure the provision of sleepers to match the rail delivery, either from internal sources or by importing

b) Rail fastenings.

The rail fastenings ordered appear to be approximately three times that necessary to match the rail ordered. I see no reason for this so far as I am aware there is no stock of rail and sleepers in this country rendered useless by lack of fastenings.

3. Bridging.

In the whole period, 35,500 tons of raw material are requested for the manufacture of metal truss bridges. This will correspond to 20,000 lineal feet of bridging. Again, whilst there is no doubt that this amount of bridging is necessary for the permanent rehabilitation of the railways outlined in the plan, it is extremely doubtful whether the I.S.R. are capable of fabricating and erecting the bridges in the time. If the time element is unimportant, then the figure is reasonable.

2,000 lin. Metres of joints are requested for temporary bridging. This is reasonable.

4. Bricks and building materials.

The request for bricks and cement appear to be excessive for essential works, though on the basis of permanent reconstruction of all buildings and structures on an elaborate scale, the figures could perhaps be justified. I consider, however, that they should be given careful consideration. Presumably the demand is put in purely that fuel should be provided to enable the material to be produced from local sources

5. Civil Engineering tools and equipment.

Items requested are in reasonable quantity. There seem, however, many omissions. It may be recalled that the Italians possess plant such as bulldozers and tracked cranes, which for the c

1828

- 2 -

of debris in station yards etc. are essential, if quick results are to be obtained.

No doubt they are relaying on plant still owned by Italian Contractors.

(Ratter J.) Colonel
D.D. Tn (Const.).

0 5 7 8