



GOVERNMENT OF INDIA
TARIFF COMMISSION

REPORT

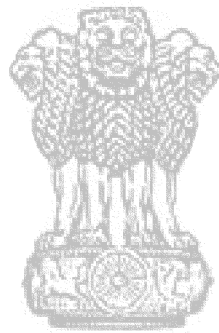
On the Continuance of Protection to the Non-Ferrous Metals Industry



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GOVERNMENT OF INDIA
MINISTRY OF COMMERCE AND INDUSTRY
DEPARTMENT OF HEAVY INDUSTRIES

New Delhi, the 2nd December, 1957.

RESOLUTION

Tariffs

No. 22(4)-T.R./57.—The Tariff Commission has submitted its Report on the continuance of protection to the Non-Ferrous Metals Industry on the basis of an inquiry undertaken by it under Sections 11(e) and 13 of the Tariff Commission Act, 1951. Its recommendations are as follows:—

- (1) Protection granted to non-ferrous alloys covered by I. C. T. Item Nos. 65(a), 69(2), 70(1) (excluding lead strips), 70(4), 70(6) and 70(9) should be discontinued with effect from 1st January, 1958. It will, however, be open to the industry to apply for protection if at any time it finds it difficult to face competition from imported products. Lead strips should continue to be protected up to 31st December 1959 at the existing rate of duty.
- (2) Protection to non-ferrous semi-manufactures covered by I. C. T. Item Nos. 64(3), 67(1), 67(2), 68(2) and 70(5) (excluding brass wires) should be continued up to 31st December, 1959 at the prevailing rates of duty. Brass Wire should be deprotected with effect from 1st January, 1958.
- (3) Protection to the non-ferrous manufactures covered by tariff item Nos. 64 (excluding copper sheets, tubes and pipes), 67, 68 (excluding zinc strips) and 70 (excluding brass sheets, tubes and pipes) should be discontinued when the present period of protection expires on 31st December, 1957. Copper sheets, tubes and pipes, zinc strips, and brass sheets, tubes and pipes should continue to be protected at the existing rates of duty up to 31st December, 1959.
- (4) The duty on brass wires and on brass wire-mesh be made equal.
- (5) Government should take steps to obtain release from their commitments under the General Agreement of Tariffs and Trade so that they may have complete freedom to impose customs duties which may be found necessary on unwrought lead and zinc.
- (6) The Development Wing should take early steps to reassess the installed capacity for non-ferrous alloys on single shift of individual units, having regard to the type and capacity of the furnaces used by them.
- (7) The Development Wing should take early steps to reassess the rolling, extruding and drawing capacity of each of the licensed units for non-ferrous semi-manufactures having regard to the capacity of the finishing mills.

(ii)

- (8) The Iron and Steel Controller should, in concert with the customs authorities, take steps to ensure that no recoverable tin-plate scrap is exported.
 - (9) The Iron and Steel Controller should undertake a survey of tin-plate scrap arisings in the country and take appropriate measures to make them available to the detinners after satisfying himself that the three units at present engaged in the recovery of tin-plate scrap arisings have the necessary plant & machinery to recover tin to the maximum extent.
 - (10) Intensive efforts should be made to locate non-ferrous metals bearing mines and to prospect commercially the exploitable areas so located.
 - (11) All the units in the industry should take steps to introduce a proper system of costing as early as possible and report to the Commission before 30th June, 1958 in order to enable to undertake detailed investigation into the claim of the non-ferrous semi-manufactures industry to continuance of protection.
2. Government accept recommendations (1) to (4) and will take suitable steps to implement them in due course.
 3. Government have taken note of recommendations (5) to (10) and will take appropriate action.
 4. The attention of the industry is invited to recommendation (11).

ORDER

ORDERED that a copy of the Resolution be communicated to all concerned and it be published in the Gazette of India.

S. RANGANATHAN,
Secretary to the Government of India.

New Delhi, the 2nd December, 1957.

Tariffs

Now, THEREFORE, in exercise of the powers conferred by sub-section (1) of Section 4 of the said Act, as in force in India and as applied to the State of Pondicherry, the Central Government hereby increases, with effect from the duty of customs on the said article so that the duty chargeable shall from the said date be 40 per cent *ad valorem*.

S. RANGANATHAN,
Secretary to the Government of India.



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REPORT ON THE CONTINUANCE OF PROTECTION TO THE NON-FERROUS METALS INDUSTRY

1. The claim of the non-ferrous metals industry to protection and assistance was first examined by the Tariff Board in 1946 on a reference by the Government of India in the late Department of Commerce. The Board conducted a summary inquiry for interim relief to the industry pending the formulation of a tariff policy appropriate to the post-war needs and conditions of the country and the establishment of a permanent machinery for investigating claims from industries seeking protection. The scope of the inquiry covered production of (a) primary or virgin metals, except aluminium and antimony, (b) secondary metals, refining of scrap and the manufacture of alloys, (c) semi-manufactures such as, sheets, circles, strips, bars, rods, pipes and tubes, and (d) manufactures such as wires, cables, conductors, water and steam fittings, castings for general engineering purposes and sheet metal products. On the recommendations of the Board, the industry was granted protection in 1948. The period of protection which was to last up to 31st March, 1950 was renewed year after year and it is due to expire on 31st December, 1957.—The scheme of protection recommended by the Tariff Board and accepted by Government provided, *inter alia*, for the following :—

- (1) Removal of duty on copper unwrought, tin, nickel, cobalt, chromium, tungsten and magnesium;
- (2) Removal of duty on scrap of all non-ferrous metals and alloys, including tin-plate scrap;
- (3) Maintenance of duty-free import of lead ingot, lead scrap, zinc ingots, zinc slabs, blocks or bars and zinc scrap;
- (4) Removal of duty on mazak;
- (5) Conversion of the then prevailing duty of 30 per cent. *ad valorem* into an equivalent protective duty on the following items, namely,
 - (a) nickel alloys, including nickel-silver and cupro-nickel,
 - (b) yellow metal alloys other than brass (i.e., gun metal, bronze, bell metal and phosphor bronze),
 - (c) tin solder and other white metals,
 - (d) type metal,
 - (e) brass sheets,
 - (f) copper sheets,
 - (g) tubes, pipes and sections of brass and lead,
 - (h) manufactured articles, such as, steam and sanitary fittings;
- (6) Levy of a protective duty of 10 per cent. *ad valorem* on brass ingots;

- (7) Reduction of duty on lead and zinc sheets from 30 per cent. *ad valorem* to 20 per cent. *ad valorem* and conversion of this rate into a protective rate;
- (8) Levy of a protective duty of 35 per cent. *ad valorem* on brass wires and rods;
- (9) Levy of protective duties of 45 per cent. *ad valorem* (standard) and 35 per cent. *ad valorem* (preferential) on arsenical copper rods other than electrolytic copper rods;
- (10) Conversion of the prevailing duties of 36 per cent. *ad valorem* (standard) and 24 per cent. *ad valorem* (preferential) on pipes and tubes made of copper into equivalent protective rates;
- (11) Levy of a protective duty of 20 per cent. *ad valorem* (preferential) and 30 per cent. *ad valorem* (standard) on electrolytic copper rods; and
- (12) Raising of duty on bare hard drawn or annealed electrolytic copper wire and A.C.S.R. from 10 per cent. *ad valorem* to 30 per cent. *ad valorem* and making it protective.

The above rates of duties underwent some changes consequent on the introduction of revenue surcharges by Finance Act, 1951. The revenue surcharges were, however, abolished with effect from 16th May, 1957 by Finance (No. 2) Act, 1957, and simultaneously the rates of duty applicable to several items were raised. The current rates of duty applicable to the protected articles are given in Appendix I.

2. The present inquiry was undertaken by the Tariff Commission under section 11(e) read with section 13 of the Tariff Commission Act, 1951, which empowers the Commission to inquire into and to make recommendations in relation to the protection granted to an industry with a view to its increase, decrease, modification or abolition according to the circumstances of the case.

3.1. The scope of the present inquiry covers all the protected articles mentioned in Appendix I, except electrolytic copper rods, bare copper conductors and A. C. S. R. (Aluminium Conductor Steel Reinforced). The latter three items form the subject of a separate inquiry. The Indian Non-Ferrous Metals Manufacturers' Association, Calcutta, has asked for the inclusion of virgin lead and "zinc concentrates" in the scope of the inquiry and the representation from the Metal Corporation of India Ltd., Calcutta, the party interested in the production of lead and zinc, has confirmed it. Government had also referred to the Commission the following three cases :—

- (a) Claim of the nickel anode industry to protection;
- (b) The case for revision of duty on zinc sheets; and
- (c) The case for enhancement of duty on brass wire-mesh.

3.2. The Indian Non-Ferrous Metals Manufacturers' Association in its memorandum to the Commission dated 5th August, 1957 stated that it was agreeable to the withdrawal of protection from brass and copper sheets of commercial quality, non-electrical wires of brass and copper and all non-ferrous alloys provided that the Commission and Government were prepared to consider at the appropriate time industry's request for protection in the event of any unexpected competition from imports being experienced in the future. The Association confined its request for protection to the following items alone :—

- (a) virgin lead and zinc;
- (b) lead and zinc sheets;
- (c) industrial sheets of brass and copper up to 28 SWG;
- (d) rods, pipes and tubes of copper and brass; and
- (e) secondary tin, i.e., tin recovered from tin-plate scrap.

3.3. During the discussion at the public inquiry it was generally agreed that so far as the production of secondary metals, refining of scrap and manufacture of alloys were concerned, there was no need for protection and, therefore, it may be discontinued in respect of those items which were hitherto protected. As regards the items which required continuance of protection, the consensus of opinion was that they should be examined in greater detail and that separate inquiries should be conducted for that purpose.

3.4. We have considered the position carefully and have reached the conclusion that rather than deal with four broad categories of virgin metals from ores, refining of scrap and manufacture of alloys, semi-manufactures such as sheets, circles, strips, bars, rods, pipes and tubes and manufactures of wires and cables and sheet metal products in an omnibus inquiry, we would be in a position to examine more fully the merits of claims for protection and assistance of individual items if separate investigations were held according to the needs of each case. We are fortified in this decision by the following considerations. After the last inquiry in 1946, the structure of the industry has considerably changed. It was found necessary to hold a separate inquiry in the case of manufactures of bare copper conductors and A.C.S.R. We are convinced that the case for the development of our lead and zinc resources requires a specific inquiry for there is only one unit at present engaged in the exploitation of lead and zinc concentrates that desires to embark on plans of expansion in its activities involving heavy capital outlay. Further, there are several units in the industry which are engaged simultaneously in the manufacture of alloys, production of semi-manufactures as well as manufactures like castings for general engineering purposes and they have represented that in the range of various items they need protection in respect of some of them and are no longer in need of it for others. We should, therefore, carefully go into the merits of these complicated cases and take appropriate decisions after thorough investigation into the cost of production of individual items. We have found that the units which our Cost Accounts Officer visited for calculating fair ex-works costs of individual items for which protection has been

asked were unable to furnish the necessary cost data. Unless this information in detail is forthcoming it is extremely difficult for us to work out even approximately the quantum of protection required for them. In addition, the Government of India have given an undertaking under the General Agreement on Tariffs and Trade to the effect that they would allow import of virgin lead and zinc duty-free. The question whether extraction of these metals should be assisted by tariff protection or subsidy or by a combination of both would need very careful consideration. Mining and extraction of non-ferrous metals require technical knowledge and skill of a specialised character. The issues of rationalisation and diversification in the activities of various producers need careful consideration so that there is no overlapping or idle capacity. We have, therefore, decided that separate inquiries should be held for the following items :—

- (a) An inquiry into virgin lead and zinc industry;
- (b) An inquiry into the manufacture of lead and zinc sheets and strips;
- (c) An inquiry into manufactures of brass and copper (sheets, rods, pipes and tubes); and
- (d) An inquiry into the manufacture of nickel anodes (cast and rolled).

4.1. Though the statutory Tariff Commission was formed in 1952 on a permanent basis to investigate into the claims of industries to protection or assistance, the Commission could undertake investigation into the claim of the non-ferrous metals industry to continuance of protection only in 1955. Considerable changes have taken place since the Board held its inquiry in 1946 and the response to Commission's questionnaire from the industry was not satisfactory. We could not proceed with the case at that time as some other urgent cases were referred to us by Government. The inquiry was, therefore, postponed to a later date. In July, 1957 a press note was issued inviting persons and associations interested in the industry to obtain copies of the relevant questionnaires from the Commission and to send their replies. Supplementary information was also obtained from those who had already replied in response to the Commission's questionnaire in 1955 in order to bring the data up-to-date. The Collectors of Customs at the principal ports were requested to furnish information relating to c.i.f. prices and landed costs of latest imports of certain selected items of non-ferrous alloys and semi-manufactures. A supplementary memorandum on the industry indicating the development that had taken place since 1955 was obtained from the Development Wing. The Council of Scientific and Industrial Research was addressed for information about the research work on non-ferrous metals carried out at the National Metallurgical Laboratory, Jamshedpur, the Central Electro-Chemical Research Institute, Karaikudi, etc. The Director-General of Supplies and Disposals was requested to supply information about the sale of scrap of each of the alloys covered by the inquiry, the prices at which they were sold from January 1955 to June

1957. Detailed information indicating the developments that have taken place regarding the location of the deposits of non-ferrous ores in the country and the experiments made for commercial exploitation of such ores was called for from the Geological Survey of India and the Indian Bureau of Mines. An inquiry was made from the Iron and Steel Controller about the extent and nature of competition offered by stainless steel sheets and utensils to copper/brass sheets and utensils. The Indian Standards Institution was asked for information about the latest position regarding standard specifications for non-ferrous metals alloys and semi-manufactures. A list of those to whom questionnaires and letters were issued and from whom replies or memoranda were received is given in Appendix II.

4.2. Shri K. R. Damle, Chairman, Shri J. N. Dutta and Shri R. S. Bhatt, Members of the Commission visited the factories of Messrs. Kamani Metals and Alloys Ltd., Indian Smelting and Refining Co. Ltd., and Indian Standard Metal Co. Ltd., Bombay on 26th July and 14th and 26th August, 1957 respectively. Dr. S. K. Muranjan and Shri J. N. Dutta, Members, visited the factories of National Pipes and Tubes Co. Ltd., and Binani Metal Works Ltd., Calcutta on 5th September and the factories of Eyre Smelting Ltd., and National Carbon Co. (India) Ltd., on 6th September, 1957. Shri S. K. Basu, Cost Accounts Officer, visited the factories of Kamani Metals & Alloys Ltd., and Indian Smelting and Refining Co. Ltd., Bombay in July and August, 1957 and examined the costs of production of certain non-ferrous semi-manufactures and alloys produced by them.

4.3. A public inquiry was held on 21st August, 1957 at the office of the Commission in Bombay. A list of persons who attended the public inquiry is given in Appendix III. Further discussion was held on 24th August, 1957 at the Commission's office with the representative of the Development Wing, the Chairman of the Development Council for Non-ferrous Metals and the representatives of the Indian Non-Ferrous Metals Manufacturers' Association.

5.1. Virgin and secondary metals which are the raw materials for alloys and semi-manufactures included in the scope of the present inquiry are allowed to be imported free of duty. In view of their importance in the national economy, a brief description of the present position of each of the metals is given below :—

5. Virgin metals

5.2. Copper.

5.2.1. Since the Tariff Board's inquiry in 1946 there has been no addition to the only unit engaged in the manufacture of virgin copper. The rated capacity of Indian Copper Corporation is reported to be 7,200 tons of fire refined copper per annum. The Company is marketing its products partly as copper ingots and partly as brass sheets and circles. There has been no significant development of this industry since the last inquiry.

5.2.2. *Demand and production.*—The Development Wing has estimated the current demand of virgin copper at 30,000 tons a year and expects that it will go up to 45,000 tons a year by 1960-61. Production of virgin copper in this country during 1956 was 7,628 tons and imports were 30,421 tons. The total availability was thus of the order of 38,000 tons. Taking the average of the past three years we arrive at a lower figure of 23,500 tons, as representing the average annual demand over the last three-yearly period. Considering the fact that 1954 and 1955 were abnormal years for non-ferrous metals, we consider that it would not be proper to rely too much on the lower imports of 1954 and 1955 which reduced the average of the last three years. After taking into account the various factors which influence the demand of the metal particularly the shift from copper to aluminium and stainless steel in certain fields of manufacture we estimate the current demand to be about 30,000 tons a year. The annual production since 1951 is stated below :—

Production (tons)						
1951	1952	1953	1954	1955	1956	1957 (Jan.-March)
7084	6079	4920	7161	7281	7628	1781

Thus the domestic production in 1956 was about 29 per cent. of the estimated demand. In this connection it may be pointed out that in its 1946 report the Tariff Board estimated the production of copper from scrap at 5,000 tons a year. We have, however, been informed this time that the annual arising of copper or alloy scrap is about 5,000 tons and that the scrap is used along with virgin metals in the production of durable articles or alloys.

5.2.3. Indian Copper Corporation Ltd. has received a licence under the Industries (Development and Regulation) Act, 1951 for setting up a plant for the manufacture of electrolytic copper with a capacity of 8,400 tons a year. The Corporation has not yet finalised its plans. It expects to meet the increased requirements of ore by a more intensive working its own mines when the proposed electrolytic plant goes into production; otherwise a part of its requirements will have to be obtained from abroad in the form of blister copper. We are also informed that Kamani Metals & Alloys Ltd. is interested in the establishment at Khetri or Daribo of a copper refinery for the manufacture of electrolytic copper with an installed capacity of 10,000 tons a year using imported blister copper.

5.2.4. *Import control policy and imports.*—Copper was allowed to be imported under O. G. L. (General) till the end of June, 1957. In the quarter July-September, 1957 licences were granted *ad hoc*. In the current licensing period, namely, October 1957—March 1958, quota licences for 85 per cent. (General) and 85 per cent. (Soft) of one half of best year's imports are allowed to established importers

and licences are given on the basis of twelve months' entitlement. The quantity and value of imports of copper (unwrought and old for re-manufacture) for the period 1951-56 were as follows :—

Year	Quantity	Value
	(tons)	(Rs. in lakhs)
1951	7,808.80	230.55
1952	14,531.70	511.00
1953	12,609.30	466.19
1954	20,259.70	619.32
1955	15,665.35	676.51
1956	30,421.50	1,459.12

5.3. Lead and Zinc.

5.3.1. Metal Corporation of India Ltd., Calcutta is the only producer of lead in the country, having its mines and ore-dressing plant situated at Zawar mines in Rajasthan. Its smelter is located at Tundoo in Bihar. The present smelting capacity of this unit is reported to be 6,000 tons a year. The capacity of the ore-dressing plant at the company's mines is 500 tons of ore per day. Out of the beneficiation of ore at the mill, lead concentrates and zinc concentrates are produced. The lead concentrates are smelted at the company's smelter, whereas zinc concentrates are sent to Japan for treatment on toll basis and the total recovery of metallic zinc is brought back.

5.3.2. Lead.

5.3.2.1. *Demand.*—The Development Council for Non-ferrous Metals constituted by the Government of India in January 1957 has estimated the current demand of lead at 10,000 to 12,000 tons a year. The total availability of this metal during 1956 was 18,331 tons made up of (a) domestic production of 2,497 tons, and (b) import of 15,833.85 tons. The average of the past three years was, however, lower, namely, 12,878 tons. Actual imports during the first six months of the current year were 6,651 tons. We have taken into account the several factors that affect the demand of this metal and have come to the conclusion that the current demand should be placed at 15,000 tons a year.

5.3.2.2. *Production.*—The production of lead as reported by the Development Wing was as under :—

Production (tons)						
1951	1952	1953	1954	1955	1956	1957 (Jan.—March)
859	1132	1694	1788	2234	2497	674.15

We understand that antimonial lead averaging about 600 to 800 tons a year is reclaimed by two or three manufacturers of storage batteries from lead scrap.

5.3.2.3. *Import control policy.*—Imports of lead were allowed on O. G. L. (General) till the end of June 1957. In the quarter July-September 1957 imports were allowed *ad hoc*. During the current licensing period, namely, October 1957—March 1958 the quota for established importers is 85 per cent. (General) and 85 per cent. (Soft) of one-half of best year's imports. Licences are given on the basis of twelve months' entitlement.

5.3.2.4. *Imports.*—The following were the quantity and value of imports of lead unwrought (pig and other sorts) during the years 1951 to 1956 :—

Year	Quantity	Value
	(tons)	(Rs. in lakhs)
1951	7,680.15	164.27
1952	4,091.50	89.70
1953	5,168.75	66.26
1954	10,945.40	149.29
1955	11,853.30	176.62
1956	15,833.85	265.92

5.3.3. Zinc.

5.3.3.1. At present there are no smelting or refining facilities in the country for the manufacture of virgin zinc. Zinc is found in association with lead and Metal Corporation of India is separating lead concentrates from zinc concentrates at their mines from the mixed ore. The Company is, therefore, allowed to export zinc concentrates to Japan on toll basis and bring back metallic zinc.

5.3.3.2. *Demand.*—The Development Council for Non-ferrous Metals has estimated the current demand of zinc at 38,000 tons a year. Since the import of this metal during the first six months of the year was of the order of 18,100 tons, we accept the Council's estimate as reasonable.

5.3.3.3. *Production.*—The production of zinc concentrates by the Metal Corporation of India Ltd. during the years 1951-52 to 1956-57 was as follows:—

(Tons)					
1951-52	1952-53	1953-54	1954-55	1955-56	1956-57
180	572	711	2073	1333.5	3219.6

It is understood that about 2,000 tons of hard zinc (i.e., zinc contaminated with impurities and traces of iron) is recovered annually. It is mostly used by small-scale utensil manufacturers in Uttar Pradesh.

5.3.3.4. *Import control policy.*—Imports of zinc or spelter unwrought including mazak alloys of zinc and aluminium containing not less than 94 per cent. zinc, zinc dross, dust, ashes and zinc in the form of ingots, cake, tile, slab, plate and granulations including all forms of zinc scrap were allowed on O. G. L. (General) till the end of June, 1957. During the quarter July-September, 1957 licences were granted *ad hoc*. During the current licensing period, namely, October 1957—March 1958 the quota for established importers is 85 per cent. (General) and 85 per cent. (Soft) of one-half of best year's imports. Licences are given on the basis of twelve months' entitlement.

5.3.3.5. *Imports.*—The quantity and value of imports of zinc or spelter unwrought during the years 1951 to 1956 were as follows:—

Year	Quantity	Value
	(tons)	(Rs. in lakhs)
1951	17,466.70	503.68
1952	24,021.30	613.73
1953	23,980.25	288.79
1954	37,597.45	417.62
1955	31,028.35	406.80
1956	35,258.00	483.40

5.3.3.6. The Metal Corporation of India Ltd. has plans for establishing an electrolytic zinc smelter of 12,000 to 15,000 tons capacity by early 1960 when it expects to obtain electricity from the Chambal Valley Project. As stated in paragraph 3.4, we have

decided to undertake a separate inquiry into the extraction of zinc and lead in the near future. As a result of this inquiry it may be found necessary to give tariff protection to this industry. We recommend that Government should take urgent steps to obtain release from their commitments under the General Agreement on Tariffs and Trade so that they may have complete freedom to impose customs duties which may be found necessary on unwrought lead and zinc. It is not possible to finalise a scheme of protection for the industry engaged in the extraction of lead and zinc until the necessary release from commitments in respect of them has been secured.

5.4. *Tin.*

5.4.1. *Demand.*—The Development Wing has estimated the current demand of tin at 4,500 tons a year which seems to us to be reasonable.

5.4.2. *Production.*—There is no production of primary tin in the country. At present there are, however, 3 units engaged in the recovery of tin from tin-plate scrap. They are (i) Montana Private Ltd., Bombay, (ii) Metalo Chemical Works, Calcutta, and (iii) Detinners Private Ltd., Calcutta. The third unit has its factory in Bombay. Montana Private Ltd. has represented to us that it is finding it difficult to obtain sufficient quantity of tin-plate scrap at a reasonable price for working its detinning plant. We were informed at the public inquiry that the total tin-plate scrap available in the country would be of the order of 11,000 to 12,000 tons a year, but that the entire quantity was not available to detinners as the scrap arisings are distributed all over the country and it is not feasible to transport them economically to Calcutta and Bombay. Metalo Chemical Works, Calcutta has, however, stated in a written memorandum that it is obtaining tin-plate scrap locally and also from Madras, Delhi, Agra and other places except Western India. It was represented to us that the present restriction by which only detinned scrap can be exported was not rigorously enforced with the result that a good quantity of tin-plate scrap from which tin could be recovered was mixed with irrecoverable scrap and exported. In view of the importance of the detinning industry we recommend that the Iron and Steel Controller should, in concert with the Customs authorities, take steps to ensure that no recoverable tin-plate scrap is exported. We also recommend that the Iron and Steel Controller should undertake a survey of tin-plate scrap arisings in the country and take appropriate measures to make them available to the detinners after satisfying himself that the three units at present engaged in the recovery of tin from tin-plate scrap arisings have the necessary plant and machinery to recover tin to the maximum extent.

5.4.3. *Import control policy.*—Tin block and tin scrap were under O. G. L. (Soft) till the end of June 1957. During the quarter July-September 1957 licences were granted *ad hoc*. During the current licensing period, namely, October 1957—March 1958 established importers are granted licences for import from soft currency areas to the extent of 85 per cent. of one-half of best year's imports. Licences are given on the basis of twelve months' entitlement.

5.4.4. *Imports.*—The quantity and value of imports of tin unwrought (blocks, ingots, bars and slabs) during the years 1951 to 1956 were as follows :—

Year	Quantity (tons)	Value (Rs. in lakhs)
1951	2,925.45	407.61
1952	2,176.75	268.78
1953	2,937.90	292.08
1954	3,774.25	370.31
1955	3,640.00	352.21
1956	4,180.55	398.89

5.5 Nickel.

5.5.1. *Demand.*—We have estimated the current demand at 2,000 tons a year which is based on the consumption of nickel and nickel alloys in 1956.

5.5.2. *Production.*—The Indian Bureau of Mines not yet been able to locate any workable nickel ore deposits. However, traces of nickel are found to occur in the copper ore processed by the Indian Copper Corporation. It is estimated that about 400/500 tons of nickel may be recoverable every year when the manufacture of electrolytic copper is undertaken by Indian Copper Corporation Ltd. We were informed by the representative of the Corporation that the question is under examination by its Technical Consultants.

5.5.3. *Import control policy.*—Nickel including nickel scrap in all forms excluding manufactures thereof, but including nickel pellets and nickel anodes were under O. G. L. (General) till the end of June 1957. During the quarter July-September 1957 licences were granted *ad hoc*. During the current licensing period, namely, October 1957—March 1958 the quota for established importers is 100 per cent. (General) and 100 per cent. (Soft) of one-half of best year's imports. Licences are given on the basis of twelve months' entitlement.

5.5.4. *Imports.*—The quantity and value of imports during the years 1954 to 1956 were as follows :—

Year	Quantity (tons)	Value (Rs. in lakhs)
1954	469.45	28.16
1955	160.85	13.35
1956	316.15	20.56

5.6. It will be seen from the foregoing paragraphs that we are very much deficient in the supply of important non-ferrous metals like copper, lead, zinc, tin and nickel from indigenous sources. In 1956 imports of these metals were of the aggregate value of Rs. 26.28 crores. Apart from the serious drain on foreign exchange resources which such imports involved, the supply position of these metals often remained difficult and their prices were also subject to violent fluctuations in the international market. This had an unsettling effect on the activities of the processing and manufacturing industries. Since these industries supply vital components to the engineering, electrical and chemical industries, it would not be in the interests of the country to make its further progress dependent entirely, or even primarily, on the vagaries of international markets in metals. The Geological Survey of India and the Indian Bureau of Mines are engaged in locating and commercial prospecting of non-ferrous ores in the country. It seems that much more work has to be done yet. We recommend, therefore, that further intensive efforts should be made to locate non-ferrous metals bearing mines and to prospect commercially the exploitable areas so located.

6.1. Non-ferrous alloys are broadly divided into (1) hard alloys or copper base alloys, which include brass, bronze, gun-metal, bell metal, nickel-silver, cupro nickel, etc., and (2) soft alloys or lead-tin-antimony alloys, which include white metal, anti-friction bearing metal, solders, printing and type metal and antimonial lead. There are at present 15 industrial units engaged in the production of different kinds of non-ferrous alloys that are registered with the Development Wing. Most of these units manufacture both hard and soft alloys. Since the last Tariff Board inquiry there has not been any major development in the non-ferrous alloys industry except that manganese, bronze and rosin cored solders are now manufactured in the country. Though the installed capacity in the case of alloy making is flexible because the same furnace is used in the manufacture of different kinds of alloys its rated capacity has been estimated at 69,000 tons as reported to the Development Wing. This is exclusive of the capacity of the ordnance factories, railway workshops or foundries of other concerns and small scale units which produce alloys for their own consumption. It is reported that the present alloy making capacity is more than sufficient to meet the country's demand. No information is, however, available whether the capacity is based on single or more shifts and whether it has been determined on the basis of melting equipments of each unit. For the future development of the industry it is essential that the installed capacity of the industry should be precisely determined. We, therefore, recommend that the Development Wing should take early steps to re-assess the installed capacity on single shift of individual units, having regard to the type and capacity of the furnaces used by them.

6.2. *Demand.*—We have not been able to obtain reliable estimates of the current demand of each individual type of non-ferrous alloy for it varies according to the requirements of consuming industries from year to year. The Development Wing, however, has estimated that the current demand for all non-ferrous casting alloys would not exceed 15,000 tons per annum.

6.3. Production, imports, exports and the quantity of alloys available for consumption during the year 1956 are given below :—

(Figures in tons)

	1956			
	Production	Imports	Exports	Quantity available for consumption
1. Brass, bronze and similar alloys .	7,089	254	669	6,674
2. White metals excluding solders .	5,871	..	..	5,871
3. Solders	1,255	1	..	1,256
4. Nickel alloys	27	1,209	..	1,236
TOTAL .	14,242	1,464	669	15,037

The production of individual items as available from the records of the Development Wing is given in Appendix IV. It will appear from the above that actual production of non-ferrous alloys during 1956 was about 14,000 tons against the installed capacity of 69,000 tons referred to earlier. This indicates the existence of considerable idle capacity in the country. The total import of alloys during the year which was 1464 tons represented about 10 per cent. of domestic production and was made up of 1209 tons of nickel alloys, 254 tons of brass, bronze and similar alloys and 1 ton of solders. We also exported 669 tons of brass, bronze and similar alloys, i.e., more than 2½ times the quantity of our imports of these alloys during the same year.

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6.4. It has been reported by the Development Wing that it has received no complaints from consumers regarding the quality of indigenously produced non-ferrous alloys.

6.5. *Import control policy.*—A summary of the import control policy in respect of non-ferrous alloys for the several licensing periods from January—June, 1955 to October 1957—March 1958 is given in Appendix V. Broadly, it may be stated that till the end of June, 1957 imports of alloys were allowed liberally. Exceptions were white metal, anti-friction metal, solders (cored) and printing metals, which were banned during the entire period except during 1956 when *ad hoc* licences for imports of solders were issued to radio manufacturers. During the quarter July-September, 1957 licences were mostly issued on an *ad hoc* basis. During the current licensing period, namely, October 1957—March 1958, imports of alloys, except antimonial lead, white metal, anti-friction metal, solders and printing metals, the imports of which are completely banned, are allowed on a quota basis, the extent of the quota ranging between 10 per cent. and 50 per cent. of one-half of best year's imports, depending on the nature of the alloy.

6.6. Our Cost Accounts Officer examined the costs of production of various non-ferrous alloys produced by Indian Smelting and Refining Co. Ltd., Bombay. The items selected for costing were lead Bronze Class III, Bronze Class I, Phosphor Bronze 500, Gun Metal, Gun Metal Admiralty, Type Metal 6/16, Type Metal 9/19, White Metal 90, White Metal 60, Tin Solder 50 per cent. (Non-Antimonial) and Tin Solder 40 per cent (Non-Antimonial). Cost of raw materials constitutes the major portion of the cost of production of alloys. The Company generally quotes its price of alloys on the basis of prices of raw materials prevailing at the time. It has not introduced a proper system of costing and, as it produces a large number of alloys it has been difficult to establish the cost of production of each item with reasonable accuracy. We have not been able to get the c.i.f. prices of most of the items selected for costing. The Collector of Customs, Madras could furnish the c.i.f. price for only one item namely, solder 40/60 tin-lead. The following statement shows the comparison of domestic cost of solder 40/60 tin-lead as determined by our Cost Accounts Officer with the landed cost ex-duty furnished by the Collector of Customs :—

<i>Solder 40/60 tin-lead</i>		Rs.
1. C.i.f. price per cwt.		380.00
2. Clearing charges		2.00
3. Customs duty		133.00
4. Landed cost		515.00
5. Landed cost ex-duty		382.00
6. Fair ex-factory price		296.82
7. Advantage of (6) ove (5)		85.18

6.7. Though we have not been able to obtain adequate comparative data of fair ex-works prices and c.i.f. prices of items which were selected for costing, we have reason to believe that the industry has now reached a stage, where it is in a position to satisfy the demand for non-ferrous alloys in the country at reasonable prices. As the industry has not pressed its claim to continuance of protection, we recommend that protection granted to non-ferrous alloys covered by I.C.T. item Nos. 65(a), 69(2), 70(1), 70(4), 70(6) and 70(9) should be discontinued with effect from 1st January, 1958. It will, however, be open to the industry to apply for protection if at any time it finds it difficult to face competition from imported products.

7.1. There are about 25 factories registered with the Development Wing engaged in the manufacture of various items known as semi-manufacture like sheets, strips, rods, pipes and tubes and other items. Of these, 4 major units have fairly

7. Semi-manufactures

modern rolling mills and one of them has an extrusion plant for the manufacture of rods, pipes and tubes. The capacity claimed by the units is as follows :—

	Present annual installed capacity
	(Tons)
1. Copper/Brass sheets, circles and strips	48,600
2. Copper/Brass rods, sections (including extruded items)	5,000
3. Copper/Brass pipes and tubes	360
4. Copper/Brass wires for non-electrical purposes	1,958
5. Zinc sheets, strips, etc.	5,700
6. Lead sheets	1,098
7. Lead pipes and tubes	4,800

The above figures are exclusive of the capacity of the ordnance factories, railway workshops and other establishments. As in the case of non-ferrous alloys we have found that there is no precise basis on which these capacities have been determined because the same rolling mill is used for producing sheets and strips of different metals like copper, brass and zinc. What the units themselves have given us is the combined capacity for producing sheets and strips from different metals. The Development Wing has informed us that the present installed capacity, especially for the manufacture of sheets and strips, is more than adequate to meet the country's present requirements and most of the units are working much below their installed capacity. It is, however, essential that a fresh re-assessment of the rolling, extruding and drawing capacity of individual units producing semi-manufactures of non-ferrous metals should be made as soon as possible. We, therefore, recommend that the Development Wing should take early steps to re-assess the rolling, extruding and drawing capacity of each of the licensed units having regard to the capacity of their finishing mills.

7.2. After the last tariff inquiry in 1946, the following new items are stated to have been developed in the country:

- (i) Cold rolled industrial sheets and strips of brass and copper;
- (ii) Extruded rods and sections in brass and copper;
- (iii) Extruded and solid drawn copper and brass pipes and tubes;
- (iv) Brass/copper strips up to 40 S. W. G.;
- (v) Phosphor bronze sheets to B. S. specification No. 407-1939 for Grade I;
- (vi) Silicon brass sheets; and
- (vii) Zinc strips for dry battery industry.

7.3. Production, imports, exports and the quantity available for consumption during the year 1956 are given below:—

(Figures in tons)

	1956			
	Production	Imports	Exports	Quantity available for consumption
<i>I. Copper:</i>				
(a) Rods	8,149	104	..	8,253
(b) Sheets	1,650	65	..	1,715
(c) Tubes and pipes	44	242	..	286
(d) Wires (non-electrical purposes)	407	48	..	455
(e) Other manufactures	434	392	..	826
TOTAL	10,684	851	..	11,535
<i>II. Brass, Bronze and similar alloys:</i>				
(a) Brass sheets	10,916	..	..	10,916
(b) Other alloy sheets . . . . .	..	38	..	38
(c) Brass circles	2,599	..	..	2,599
(d) Rods	1,260	461	..	1,721
(e) Tubes	8	290	..	298
(f) Wires	131	80	..	211
(g) Other manufactures	434	2,711	..	3,145
TOTAL	15,348	3,580	..	18,928
<i>III. Lead:</i>				
(a) Sheets	38	309	..	347
(b) Pipes and tubes	341	70	..	411
(c) Other manufactures . . . . .	..	110	..	110
TOTAL	379	489	..	868
<i>IV. Zinc:</i>				
Zinc wrought or manufactured, all sorts	105	2,539	..	2,644
<i>V. Tin:</i>				
Tin wrought or manufactured, all sorts . . . . .	..	2	..	2

Statistics of production of non-ferrous semi-manufactures by the organised section of the industry in the private sector, as available from the records of the Development Wing, are given in Appendix VI.

7.4. *Expansion of capacity.*—According to the Development Wing, the following new licences have been issued under the Industries (Development and Regulation) Act, 1951 for substantial expansion or production of new items of non-ferrous semi-manufactures :—

Name of the firm	Description of stores and capacity sanctioned	Date of grant of licence	Substantial expansion or New Item	Date of completion according to the terms of licence
1. Indian Smelting & Refining Co. Ltd., Bombay.	Brass/copper strips and brass coils. Installed capacity 600 tons per annum.	30-1-56	New Item	Jan., 1958.
2. Davidayal Sales Ltd., Bombay.	Seamless aluminium brass copper pipes and tubes. Installed capacity—3600 tons per annum.	6-11-56	Do.	July, 1958.
3. National Pipes and Tubes Co. Ltd., Calcutta.	Brass/copper solids and hollows. Installed capacity from 2000 to 2500 tons per annum of solids. Recently the company has been further recommended to increase its capacity from 2500 tons to 3000 tons of brass/copper solids and 300 tons to 900 tons per annum of brass/copper hollows.	31-12-56	Substantial expansion	December, 1957.

7.5. Generally there has been no complaint regarding the quality of commercial brass sheets and strips. However, for the industrial types of sheets and strips which are being increasingly used by important industries like automobile, electrical accessories, electrical lamps, dry batteries and telephone industries the quality leaves much scope for improvement. There have been several complaints from consumers of semi-manufactures which are broadly of two types: (1) the chemical composition was not controlled according to specifications, and (2) the articles were of uneven quality and lacked finish. We have been informed by the manufacturers that since the last Tariff Board inquiry they have installed laboratories for conducting physical and chemical tests of raw materials and finished products. Some of them have also introduced quality control and have improved the technical processes. These are, however, problems which we shall have to examine in greater detail when we take up separately the investigation of this industry.

7.6. *Import control policy.*—A summary of the import control policy from January—June 1955 to October, 1957—March, 1957 in respect of non-ferrous semi-manufactures is given in Appendix VII.

7.7. Our Cost Accounts Officer examined the costs of production of brass, copper and zinc sheets (industrial and commercial) at Kamani Metals and Alloys Ltd., Bombay. As we have decided to examine the claims of semi-manufactures to continuance of production separately, we do not propose to go into the question of costs in this report. We would, however, like to point that the data available were not sufficient to arrive at the actual costs of production of various types of sheets produced by the Company. From the discussions at the public inquiry and during our visits to the factories, it was brought to our notice that most of the units did not maintain cost data in sufficient detail for working out the cost of production of individual semi-manufactured items. We, therefore, recommend that all the units in the industry should take steps to introduce a proper system of costing as early as possible and report to the Commission before 30th June, 1958 in order to enable it to undertake detailed investigation into the claim of the non-ferrous semi-manufactures industry to continuance of protection. Pending such investigation, we recommend that protection to non-ferrous semi-manufactures covered by I.C.T. item Nos. 64(3), 67(1), 67(2), 68(2) and 70(5) (excluding brass wires) should be continued up to 31st December, 1959 at the prevailing rates of duty. We are aware that the industry has requested for continuance of protection only in respect of industrial sheets of brass and copper up to 28 S.W.G., but in the absence of a precise definition of commercial and industrial sheets, it would be administratively difficult to operate a scheme of protection confined to industrial sheets alone. We are, therefore, recommending continuance of protection to both industrial and commercial sheets of brass and copper.

8.1. In the previous paragraphs we have surveyed the present position of virgin metals, alloys and semi-manufactures. As a consequence of the protection recommended to the alloys and semi-manufactures, the Board in 1946 had recommended protection to a few items of non-ferrous manufactures like bare copper conductors, A.C.S.R., sanitary and other fittings. We have conducted a separate inquiry into the claim of the bare copper conductor and A.C.S.R. industries. The number of remaining items is very large, some of them enjoy protection while others do not. We are of the view that each industry requiring protection or adjustment of tariff anomaly, if any, should place its case before the Commission for its examination. We, therefore, recommend that protection granted to the non-ferrous manufactures covered by tariff item Nos. 64 (excluding copper sheets, tubes and pipes), 67, 68 and 70 (excluding brass sheets, tubes and pipes) should be discontinued when the present period of protection expires on 31st December, 1957.

8.2. There is, however, one specific case of tariff anomaly which has been referred to us for examination in the present inquiry. It relates to the brass wire mesh industry. Brass wire mesh is assessable to a duty of 35 per cent. *ad valorem* under I.C.T. item No. 70 (brass wrought and manufactures thereof not otherwise specified).

This article is produced from brass wire which is liable to a higher rate of duty of 40 per cent. *ad valorem* under I.C.T. item No. 70(5)—brass wires and rods. The Hindustan Wire Netting Co. Private Ltd. which produces wire mesh has represented to us that the domestic production of brass wires is limited up to 30 S.W.G. and that for the manufacture of wire meshes, wires of 30 S.W.G. to 40 S.W.G. are required. As the duty on such wires is higher than that on the wire mesh, the company has complained that it is unable to compete with the imported product. It has, therefore, requested that the duty on brass wire mesh be raised to 60 per cent. *ad valorem*. The question was discussed at the public inquiry when the representatives of Devidayal Metal Industries Ltd. and Bhandary Metalurgical Corporation Private Ltd. stated that they were in a position to supply brass wires of 30 S.W.G. to 40 S.W.G. If our recommendations to discontinue protection to the brass wire industry at present included in tariff item No. 70(5) and brass wire mesh industry included in tariff item No. 70 is accepted, the nature of duty on both the items would be revenue. But the tariff anomaly will still continue which is not desirable. We, therefore, recommend that the duty on brass wires should be made equal to that on brass wire mesh. This can be done either by transferring brass wire from tariff item No. 75(5) to item No. 70 under which brass wire mesh is included at present, or by opening a new item for brass wires and applying thereto the rate of duty applicable to articles under tariff item No. 70.

8.3. As two of the domestic manufacturers of brass wires are prepared to meet the demand of Hindustan Wire Netting Co. Private Ltd. we do not wish to recommend a lower rate of duty on brass wires than what is applicable to brass wire mesh. If the industry, however, wants substantive protection, it should make out a *prima facie* case for consideration of the Commission.

9.1. If our recommendations in the foregoing paragraphs are accepted, tariff protection to the articles covered by I.C.T. items listed below will have to be discontinued after the expiry of the present period of protection on 31st December, 1957.

**9. Modifications to
the Indian Customs
Tariff Schedule**

- (a) I.C.T. No. 64—Copper, wrought and manufactures of copper all sorts not otherwise specified, excluding sheets, tubes and pipes of copper.
- (b) I.C.T. No. 65(a)—Non-ferrous nickel alloys including German silver, nickel-silver and cupro-nickel containing 40 per cent. or less by weight of nickel.
- (c) I.C.T. No. 67—Lead, wrought—the following articles, namely, pipes, tubes and sections.
- (d) I.C.T. No. 68—Zinc or spelter, wrought or manufactured not otherwise specified.
- (e) I.C.T. No. 69(2)—Tin solders, white metal and anti-friction alloys.
- (f) I.C.T. No. 70—Brass wrought and manufactures thereof, not otherwise specified, excluding sheets, tubes and pipes of brass.
- (g) I.C.T. No. 70(1)—All non-ferrous alloys, etc.

(h) I.C.T. No. 70(4)—Brass unwrought, ingots, etc.

(i) I.C.T. No. 70(5)—Brass wires.

(j) I.C.T.No. 70(6)—Yellow metal alloys, etc.

(k) I.C.T. No. 70(9)—Type metal.

9.2. As regards the articles for which continuance of protection has been recommended by us for a further period of two years till 31st December, 1959 at the existing rates of protective duty, the relevant items of the I.C.T. Schedule will have to be modified and two new items 64(5) and 70(A) inserted as indicated in the following table:—

Item	Name of article	Nature of duty	Standard rate of duty	Preferential rate of duty if the article is the produce or manufacture of			Duration of protective rates of duty
				The United Kingdom	A British Colony	Burma	
64(3)	Copper rods other than electrolytic copper rods.					Free	
	(a) of British manufacture.	Protective.	40 per cent. <i>ad valorem</i>	..	..		December 31, 1959.
	(b) Not of British manufacture.	Protective.	50 per cent. <i>ad valorem</i>	..	..		December 31, 1959.
*64(5)	Copper sheets, pipes and tubes.					Free	
	(a) of British manufacture.	Protective	30 per cent. <i>ad valorem</i>	..	..		December 31, 1959.
	(b) Not of British manufacture.	Protective	40 per cent. <i>ad valorem</i>	..	..		December 31, 1959.
†67(1)	Lead sheets or strips for tea-chests.	Protective	35 per cent. <i>ad valorem</i>	..	..	Free	December 31, 1959.
†67(2)	Lead sheets or strips other than sheets or strips for tea chests.	Protective	25 per cent. <i>ad valorem</i>	..	..	Free	December 31, 1959.
†68(2)	Zinc sheets or strips not otherwise specified.	Protective	25 per cent. <i>ad valorem</i>	..	..	Free	December 31, 1959.
*70(A)	Brass sheets, pipes and tubes.	Protective	35 per cent. <i>ad valorem</i>	..	..	Free	December 31, 1959
‡70(5)	Brass rods . . .	Protective	40 per cent. <i>ad valorem</i>	..	..	Free	December 31, 1959.

*New items suggested.

†Strips included.

‡Wires excluded.

Our conclusions and recommendations are summarised as follows :—

10. Summary of conclusions and recommendations.

10.1. Government should take urgent steps to obtain release from their commitments under the General Agreement on Tariffs and Trade so that they may have complete freedom to impose customs duties which may be found necessary on unwrought lead and zinc.

[Paragraph 5.3.3.6]

10.2. The Iron and Steel Controller should, in concert with the customs authorities, take steps to ensure that no recoverable tin-plate scrap is exported.

[Paragraph 5.4.2]

10.3. The Iron and Steel Controller should undertake a survey of tin-plate scrap arisings in the country and take appropriate measures to make them available to the detinners after satisfying himself that the three units at present engaged in the recovery of tin from tin-plate scrap arisings have the necessary plant and machinery to recover tin to the maximum extent.

[Paragraph 5.4.2]

10.4. Intensive efforts should be made to locate non-ferrous metals bearing mines and to prospect commercially the exploitable areas so located.

[Paragraph 5.6]

10.5. The Development Wing should take early steps to re-assess the installed capacity for non-ferrous alloys on single shift of individual units, having regard to the type and capacity of the furnaces used by them.

[Paragraph 6.1]

10.6. Protection granted to non-ferrous alloys covered by I.C.T. item Nos. 65(a), 69(2), 70(1), 70(4), 70(6) and 70(9) should be discontinued with effect from 1st January, 1958. It will, however, be open to the industry to apply for protection if at any time it finds it difficult to face competition from imported products.

[Paragraph 6.7]

10.7. The Development Wing should take early steps to re-assess the rolling, extruding and drawing capacity of each of the licensed units for non-ferrous semi-manufactures having regard to the capacity of the finishing mills.

[Paragraph 7.1]

10.8. All the units in the industry should take steps to introduce a proper system of costing as early as possible and report to the Commission before 30th June, 1958 in order to enable it to undertake detailed investigation into the claim of the non-ferrous semi-manufactures industry to continuance of protection.

[Paragraph 7.7]

10.9. Protection to non-ferrous semi-manufactures covered by I.C.T. item Nos. 64(3), 67(1), 67(2), 68(2) and 70(5) (excluding brass wires) should be continued up to 31st December, 1959 at the prevailing rates of duty.

[Paragraph 7.7]

10.10. Protection to the non-ferrous manufactures covered by tariff item Nos. 64 (excluding copper sheets, tubes and pipes), 67, 68 and 70 (excluding brass sheets, tubes and pipes) should be discontinued when the present period of protection expires on 31st December, 1957.

[Paragraph 8.1]

10.11. The duty on brass wires should be made equal to that on brass wire-mesh. This can be done either by transferring brass wires from tariff item No. 70(5) to tariff item No. 70 under which brass wire-mesh is included at present, or by opening a new item for brass wires and applying thereto the rate of duty applicable to articles under tariff item No. 70.

[Paragraph 8.2]

10.12. The items relating to non-ferrous metals in the Indian Customs Tariff Schedule should be amended as indicated in paragraph 9.2.

[Paragraph 9.2]

11. We wish to thank the producers, importers and consumers who furnished us with valuable information in connection with this inquiry and whose representatives gave evidence before us.

Acknowledgements

सत्यमेव जयते

K. R. DAMLE,
Chairman.

J. N. DUTTA,
Member.

R. S. BHATT
Member,

RAMA VARMA,
Secretary.

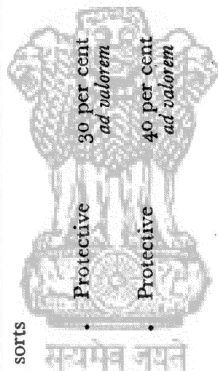
BOMBAY :
16th October, 1957.

APPENDIX I

(Vide Paragraph 1)

Table showing the current rates of duty applicable to the protected articles of the non-ferrous metals industry

Item No.	Name of the article	Nature of duty	Standard rate of duty	Preferential rate of duty if the article is the produce or manufacture of			Duration of protective rates of duty
				The United Kingdom	A British Colony	Burma	
1	2	3	4	5	6	7	8
64	Copper, wrought and manufactures of copper, all sorts not otherwise specified.					Free	December 31st, 1957.
	(a) of British manufacture	Protective	30 per cent <i>ad valorem</i>	..	..
	(b) not of British manufacture	Protective	40 per cent <i>ad valorem</i>	..	..		Do.
64(3)	Copper rods, other than electrolytic copper rods.					Free	
	(a) of British manufacture	Protective	40 per cent <i>ad valorem</i>	..	..		Do.
	(b) not of British manufacture	Protective	50 per cent <i>ad valorem</i>	..	..		Do.
64(4)	Electrolytic copper rods of black copper rods (in coils).					Free	
	(a) of British manufacture	Protective	25 per cent <i>ad valorem</i>	..	..		Do.
	(b) not of British manufacture	Protective	35 per cent <i>ad valorem</i>	..	..		Do.



1	2	3	4	5	6	7	8
65	All non-ferrous nickel alloys including German silver, nickel-silver and cupro-nickel: (a) Containing 40 per cent or less by weight of nickel	Protective	35 per cent <i>ad valorem</i>	..	..	Free	December 31st, 1957.
67	Lead, wrought—the following articles, namely, pipes, tubes and sections.	Protective	35 per cent <i>ad valorem</i>	..	..	Free	Do.
67(1)	Lead sheets for tea-chests	Protective	35 per cent <i>ad valorem</i>	..	..	Free	Do.
67(2)	Lead sheets other than sheets for tea-chests .	Protective	25 per cent <i>ad valorem</i>	..	..	Free	Do.
68	Zinc or spelter, wrought or manufactured not otherwise specified.	Protective	35 per cent <i>ad valorem</i>	..	..	Free	Do.
68(2)	Zinc sheets not otherwise specified	Protective	25 per cent <i>ad valorem</i>	..	..	Free	Do.
69(2)	Tin solders, white metal and antifriction alloys .	Protective	35 per cent <i>ad valorem</i>	..	..	Free	Do.
70	Brass, wrought and manufactures thereof not otherwise specified.	Protective	35 per cent <i>ad valorem</i>	..	..	Free	Do.
*70(1)	All non-ferrous alloys and manufactures of metals and alloys not otherwise specified. Provided that any such alloys or manufactures containing more than 97 per cent of aluminium shall be deemed to be aluminium in a crude form or aluminium manufactures as the case may be, and dutiable as such.	Protective	35 per cent <i>ad valorem</i>	..	..	Free	Do.

70(4)	Brass unwrought, ingots, billets, cakes, slabs, blooms (excluding scrap), that is to say, ingots, billets, cakes, slabs, blooms (excluding scrap) containing (1) 55 to 74 per cent of copper, (2) 26 to 42 per cent of zinc, and (3) not more than 3 per cent of components (including impurities) other than copper and zinc.	Protective	10 per cent <i>ad valorem</i>	..	Free	Do.
70(5)	Brass wires and rods	Protective	40 per cent <i>ad valorem</i>	..	Free	Do.
70(6)	Yellow metal alloys other than brass, such as gun metal, bronze, bell-metal and phosphor bronze and manufactures thereof not otherwise specified.	Protective	35 per cent <i>ad valorem</i>	..	..	Do.
70(9)	Type metal	Protective	35 per cent <i>ad valorem</i>	..	..	Do.

*70(1) NOTE.—Under Government of India, Ministry of Finance (Revenue Division), Notification No. 34-Customs, dated 26th February, 1955, Calcium Silicide is exempt from the payment of so much of the customs duty leviable thereon as is in excess of 1917/32 per cent. *ad valorem* and also from the whole of the additional duty leviable thereon under any law for the time being in force. The duty on Calcium Silicide has been raised to 20% *ad valorem* under the Finance Bill (No. 2), 1957, with effect from 16th May, 1957.

APPENDIX II

Vide Paragraph 4.1

List of firms, associations and Government Departments to whom questionnaires and letters were issued and from whom replies or memoranda were received.

* Indicates those who replied in detail.

† Indicates those who sent memoranda.

‡ Indicates those who stated that they are either not dealing in the product or are not interested in the inquiry.

A. PRODUCERS:

- *1. The Indian Copper Corporation Ltd., 8, Netaji Subhas Road, Calcutta.
- *2. The Metal Corporation of India Ltd., 10, Clive Row, Calcutta-1.
- *3. National Pipes and Tubes Co. Ltd., Stephen House, 4, Dalhousie Square East, Calcutta.
- *4. Bengal Ingot Co. Ltd., 5, Hide Road, Kidderpore, Calcutta.
- *5. Indian Smelting & Refining Co. Ltd., 159, Jamshedji Tata Road, Industry House, Churchgate Reclamation, Bombay.
- *6. Jaipur Metal and Electricals Ltd., Kamani Chambers, Micol Road, Ballard Estate, Bombay.
- *7. Jayant Metal Mfg. Co. Ltd., 924-A, Sayani Road, Bombay.
8. Aggarwal Metal Works Ltd., Jhajjar, Jhajjar Road, Rewari, Punjab.
9. Devidayal Metal Industries Ltd., Tulsiram Gupta Mills Estate, Reay Road, Bombay.
- ‡10. Hindusthan Metal Refinery & Rolling Mills Ltd., 124, Mint Street, Madras.
- *11. Indian Metal & Metallurgical Corporation, 498, Mint Street, Madras.
- ‡12. Kamani Metals & Alloys Ltd., Nicol Road, Ballard Estate, Fort, Bombay.
- ‡13. Lakshmi Metal Industries Ltd., Tripolia Bazar, Jaipur.
14. Metal Rolling Works Ltd., 104, Sion Matunga Estate, Sion, Bombay.
15. Naran-Lala Metal Works Ltd., Near Railway Station, Navsari (Western Railway).
- *16. Rashtriya Metal Industries Ltd., 28/30, Anantwadi, Bombay-2.
- ‡17. Mahesh Metal Works Ltd., Madanganj, Kishangarh, (Rajasthan).
- *18. Swastika Metal Works, Jagadri (Punjab).
- ‡19. Sayaji Iron & Engineering Co. Ltd., Chani Road, Baroda.
- ‡20. Vummiear (Mfrs.) Ltd., 162, Mount Road, Madras.
- *21. Vsant Shivaji & Co., 1388, Shukrawar Peth, Poona-2.
- *22. Bhandary Metallurgical Corporation (Private) Ltd., Vikhroli P.O., Bombay.
23. Hind Wire Industries Ltd., P-16, Kalkar Street, Calcutta.
24. Pana Lal Girdhar Lal, Sadar Bazar, Delhi.
25. Jupiter Tube Corporation Ltd., Kaiser Show Room 13, Hughes Road, Bombay-7
- *26. Waldies Industries Ltd., Post Box No. 174, Clive Buildings, Calcutta.
27. Arim Metal Industries, 32, European Asylum Lane, Calcutta.
- *28. Binani Metal Works Ltd., 38, Strand Road, Binani Buildings, Calcutta.

29. Indian Standard Metal Co. Ltd., Chinchpokli Cross Lane, Bombay.
- *30. Metallica Works Private Ltd., 11, Worli Road, Bombay-18.
- *31. Bombay Metal Refinery, 24, Old Anjirwadi, Mazagaon, Bombay.
32. Delta Metal Refineries, 177, Mukhtaram Babu Street, Calcutta-7.
- *33. Eyre Smelting Ltd., 5, Hide Road, Kidderpore, Calcutta.
- *34. Saru Smelting & Refining Corporation Ltd., Near Cantt. Railway Station, Meerut.
35. Banarsi Shah Charan Singh, Roorkee, U.P.
- *36. Bombay Metal & Alloys Mfg. Co. Ltd., Post Box No. 6210, Mazagaon, Bombay-10.
- †37. G. T. R. Co. Ltd., 37, Dum Dum Road, Calcutta-30.
38. J. N. Dass & Co., Belitious Road, Howrah.
- †39. Leader Engineering Works, Hoshiarpur Road, Jullunder City.
40. Pioneer Engineering Works, Hoshiarpur Road, Jullunder City.
- †41. Premier Tools & Accessories Ltd., Bangrod (M.P.), Western Railway.
42. S. P. Guchait & Sons Ltd., 2, Madusudan Pal Chowdhury Lane, Howrah.
- *43. Hussein Metal Rolling Mill Private Ltd., Atlas Mill Compound, Reay Road, Bombay-10.
- *44. Deccan Metal Works, 20, Nagesh Peth, Poona-2.
45. Baroda Rolling Mills Ltd., Chhani Road, Baroda.
46. Gulamally Abdul Hussain & Co., 66, Narayan Dhuru Street, Bombay-3.
- †47. Prakash Engineering Co. & Rolling Mills, Free-gunj, Agra.
48. Bombay Brass Works Ltd., Jullunder City.
- *49. Hind Metal Works, Udyamnagar, N. Satara.
- †50. National Rolling & Steel Ropes Ltd., Stephen House, 4, Dalhousie Square, Calcutta-1.
51. Indian Rolling Mills Ltd., Calcutta.
52. Lilooh Steel and Wire Products Ltd., Calcutta.
53. Ganga Metal Refinery, 43, Strand Road, Calcutta.
54. National Screw and Wire Products Ltd., Stephen House, 4, Dalhousie Square, Calcutta.
55. J. B. Metal Industries, Sevrce, Bombay.
56. General Metal Industries, Mirzapur.
- *57. Hindusthan Metal Works, Hathras (U.P.).
- †58. Patent Tiffin Carrier Sanghavi Co., 110, Shivaji Nagar, Poona-5.
59. Vijay Industries, Ambawadi, Parel Tank Road Bombay.
- *60. The National Carbon Company (INDIA) Ltd., Pollock House, 18-A, Brabourne Road, Calcutta.
- †61. Devidayal Stainless Steel Industries (Private) Ltd., Darrukhana, Reay Road, Bombay-10.
62. Montana Private Ltd., Rahimtoola House, Homji Street, Fort, Bombay.
- †63. Detinners Private Ltd., 217 Chakla Street, Bombay-3.
- †64. Metal Chemical Works, 39, Colootola Street, Calcutta.

B. IMPORTERS :

- *1. Imperial Chemical Industries (India) Ltd., I.C.I. House, 34, Chowringhee, Calcutta-16.
2. India Metal Agencies, India House, Opp. G. P. O., Fort, Bombay-1.
- *3. Muni & Co., General Assurance Building, 232 D. Nowrojee Road, Fort, Bombay.
4. Bengal Wire Nails Co. Ltd., Park Circus, Calcutta.
5. Pragdas Girdhardas, Calcutta.
6. J. Stone & Co. (India) Ltd., 5, Hide Road, Kidderpore, Calcutta.
7. British Metal Corporation, Calcutta.
8. Metal Distributors Private Ltd., Managing Agents: Mathurdas Govardhandas, 38, Strand Road, Calcutta.
- †9. Pragdas Mathurdas, 43, Strand Road, Calcutta.
10. Makhnallal & Co., 115, Khand Bazar, Bombay-3.
11. Tarachand Walchand, 2nd Bhoiwada, Bombay.
12. R. Wreight & Partners, New Delhi.
13. Milling Treding Co., 105, Appollo Street, Bombay-1.
14. H. Filinger & Co. 16, Ormiston Road, Bombay.
15. Delhi B. Shroff, Dr. D. Naoraji Road, Bombay-1.
16. Devi Dayal Industries Ltd., Reay Road, Bombay.
17. Bombay Metal Syndicate, Gulalwadi, Kika Street, Bombay-4.
- *18. The Binani Commercial Co. Ltd., Managing Agents : P. Mathurdas (Bombay) Ltd., 28/30, Anantwadi, Bombay-2.

C. CONSUMERS :

1. Dan Deoker & Co., Mahim, Bombay.
2. Govardhandas P. A., Jullunder City.
3. Indian Red Lead Factory Ltd., Tollygunge, Calcutta.
- †4. Dazzie Products Ltd., 139, Canning Street, Calcutta-1.
- *5. Krudd Industries Ltd., 20/21, Stephen House, Dalhousie Square, Calcutta-1.
6. Prabhat Products Co., Noble Chambers, Parsi Bazar Street, Bombay-1.
- *7. C. S. Pochee and Son. 586, Chira Bazar, Girgaum Road, Bombay-2.
8. Metro Engineering Works, Sabu Siddick Street, Palton Road, Bombay-1.
- *9. Hindusthan Motors Ltd., 8, Royal Exchange Place, Calcutta-1.
- *10. The Premier Automobiles Ltd., Agra Road, Kurla, Bombay-37.
- *11. Mahindra & Mahindra Ltd., Gateway Building, Appollo Bunder, Bombay-1.
- †12. Ashok-Leyland Ltd., 38, Mount Road, Madras-6.
- *13. The Standard Motor Products of India Ltd., 29, Mount Road, Madras-2.
- †14. The Automobile Products of India Ltd., Agra Road, Bhandup, Bombay-40.
15. Tata Locomotive & Engineering Co. Ltd., (Automobile Division), Bombay House. Bruce Street, Bombay-1.
- *16. Simpson & Co. Ltd. Mount, Road, Madras-2.
- *17. Balmer Lawrie & Co. Ltd., 21, Netaji Subhas Road, Calcutta.

18. Bennet Coleman & Co. Ltd., Times of India, Building, Bombay-1.
- ‡19. India National Press (Bombay) Ltd., 21, Dalal Street Bombay-1.
- ‡20. The Victor Industries, Amritsar.
21. The Universal Screw Factory, Amritsar.
22. Cico Ltd., 2/1 Barrackpore Trunk Road, P.O. Barrackpore, Calcutta.
- *23. Gurunanak Electro-Mechanical Works, Phagwara (E.P. Rly.).
24. Tarachand Walchand, 13, Second Bhoiwada, Bombay-2.
25. Atlas Metal Pressing Works, Godji Building, Gulal Wadi, Bombay-2.
- ‡26. Kirloskar Bros. Ltd., Kirloskarwadi, South Satara.
27. Crompton Parkinson (Works) Ltd., Worli, Bombay.
- *28. Godrej & Boyce Mfg. Co. Ltd., Lalbaug Parel, Bombay-12.
29. Kersons Manufacturing Co. of India., Ltd., Agra Road, Bombay-40.
30. Swastic Metal & Engg. Co., Curry Road, Bombay-13.
- *31. Annapurna Metal Works, 3, Ashu Biswas Road, Bhawanipur, Calcutta-25.

D. GOVERNMENT CONSUMERS :

- ‡1. The Secretary, Railway Board, New Delhi.
- *2. The Controller of Stores, Southern Railway Perambur, Madras.
3. The Controller of Stores, North Eastern Railway, Gorakhpur.
- *4. The Controller of Stores, Western Railway, General Offices Churchgate, Bombay-I.
- *5. The Controller of Stores, Central Railway, V.T., Bombay-1.
6. The Controller of Stores Eastern Railway, Calcutta.
7. The Controller of Stores, Northern Railway, Delhi.
8. The Controller of Stores, South Eastern Railway, Garden Reach, Calcutta.
- *9. Railway Intergal Coach Factory, Perambur, Madras.
- *10. Chittaranjan Locomotives Works, Chittaranjan, West Bengal.
11. Delhi State Road Transport, Delhi.
12. Road Transport Department, Government of Andhra, Murshidabad, Hyderabad Deccan.
13. Home (Transport) Department, Government of West Bengal, West Bengal.
14. Bombay State Road Transport Corporation, Government of Bombay, Worli, Bombay-18.
- *15. B.E.S.&T. Undertaking, Electric House, Colaba, Bombay.
16. Government Transport Central Workshop, Ghromepet, Madras.
- *17. The Mint Master, India Government Mint, Bombay-1.
- *18. The Controller of Printing & Stationery, Government of India, New Delhi.
19. Hindusthan Cables Ltd., P.O. Hindusthan Cables, Dist. Burdwan.
- *20. Hindustan Machine Tools Ltd., Jalahalli, Bangalore.
21. Hindustan Aircraft Limited, Bangalor.
- *22. The General Manager, Indian Telephone Industries Ltd., Durvani Nagar, Bangalore.
- *23. The Director General, Ordnance Factories, Esplanade East, Calcutta.

- ‡24. Air India International, New India Assurance Building Mahatma Gandhi Road, Fort, Bombay-1.
- 25. Bharat Electronics Ltd., Jallahalli P.O., Bangalore.
- *26. Damodar Valley Corporation, Anderson House, Baker Road, Calcutta-27.
- 27. Government Central Industrial Workshop, Post Office Road, Bangalore 1.
- 28. Hindustan Shipyard Ltd., Gandhigram, Vishakapatnam, Andhra.
- 29. Hindustan Housing Factory Ltd., Jangpura, New-Delhi-13.
- 30. Indian Airlines Corporation, Thapar House, Queensway, New Delhi-1.
- *31. Machine Tools Prototype Factory, Ambernath, Thana Dist., Bombay.
- 32. Mysore Implements Factory, P.O. Hassan, Mysore.
- 33. National Instruments Factory, 15, Wood Street, Calcutta-6.
- 34. Government Electric Factory, Post Box No. 579, Mysore Road, Bangalore-2.

E. MANUFACTURERS' ASSOCIATIONS :

- †1. Indian Non-ferrous Metals, Manufacturers' Association, Indian Exchange, Calcutta 1.
- †2. Western India Sheet Roller's Association, Kamani Chambers, Nicol Road, Ballard Estate, Bombay-1.

F. DEALERS' ASSOCIATIONS:

- *1. All India Non-ferrous Metalware Manufacturers' Association, 2nd Floor, Liberty Building, Marine Lines, Bombay-1.
- *2. Bombay Metal Exchange Ltd., Gogate Mansion, Kika Street, Bombay-2.
- ‡3. Engineering Association of India, India Exchange, Calcutta-1.
- 4. Calcutta Metal Merchants Association, P-11, Mission Row Extension, Calcutta-1.
- *5. The Metal Dealers & Manufacturers' Association, Jagadhri, Punjab.
- 6. Banaras Brass Merchants Association, Thatheri Bazar, Banaras.
- †7. Metal Distributors Ltd., Binani Buildings, 38, Strand Road, Calcutta-1.
- †8. All India Stainless Steel Industries Association, 26-A, Behind Mumbadevi Post Office, Bombay-2.
- 9. The Southern India Metal Distributors Association, 127, Mint Street, Madras.
- 10. Metal Distributors Private Ltd., 12/18, Vithalbhai Patel Road, Bombay-4.

G. GOVERNMENT DEPARTMENTS :

- *1. The Chief Industrial Adviser, Metals Directorate, Development Wing, Ministry of Commerce & Industry, Shahjahan Road, New Delhi.
- *2. The Director General of Supplies & Disposals, Ministry of Works, Housing and Supply, Shahjahan Road, New Delhi.
- ‡3. The Development Commissioner, Small Scale Industries, Ministry of Commerce and Industry, Shahjahan Road, New Delhi.
- 4. The Director, Geological Survey of India, 27, Chowringhee, Calcutta.
- *5. The Director, Indian Standards Institution, 19, University Road, Civil Lines, Delhi-8.
- *6. The Iron & Steel Controller, 33, Netaji Subhas Road, Calcutta.
- 7. The Director, Indian Bureau of Mines, 19, University Road, Delhi.
- *8. The Director of Industrial Statistics, 1, Council House Street, Calcutta.

- *9. Council of Scientific & Industrial Research, Old Mill Road, New Delhi.
- *10. The Collector of Customs, New Custom House, Bombay.
- *11. The Collector of Customs, Calcutta.
- *12. The Collector of Customs, Madras.
- 13. The Collector of Customs, Cochin.
- *14. The Collector of Customs, Jamnagar.

H. FIRMS AND BODIES ADDRESSED ON SPECIFIC ISSUES

(a) *Inclusion of Nickel Anodes in the Scope*

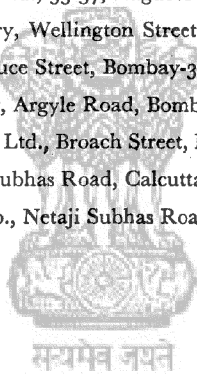
- 1. Binani Metal Works Ltd., 30, Strand Road, Calcutta.
- 2. Arim Metal Industries, 32, European Asylum Lane, Calcutta.

(b) *Revision of duty on Zinc Sheets*

- †3. Western Indian Sheet Rollers' Association, Kamani Chambers, Nicol Road, Ballard Estate, Bombay.

(c) *Enhancement of duty on brass wire-mesh*

- *4. Hindustan Wire Netting Co. Ltd., 55-57, Nagdevi Cross Lane, Bombay.
- 5. Evergreen Wire Cloth Factory, Wellington Street, Bombay-3.
- 6. Great India Net Industry, Bruce Street, Bombay-3.
- 7. Bombay Woven Wire Netting, Argyle Road, Bombay-9.
- ‡8. K. T. Steel Industries Private Ltd., Broach Street, Bombay-9.
- 9. Teetmal Jaichandlal, Netaji Subhas Road, Calcutta.
- 10. International Wire Netting Co., Netaji Subhas Road, Calcutta.



APPENDIX III

[Vide Paragraph 4.3]

List of persons who attended the public inquiry on 21 August, 1957

PRODUCERS :

1. Shri P. R. Kamani	• • •	Representing	Indian Non-Ferrous Metals Manufacturers' Association, India Exchange, Calcutta-1;
AND			
			Kamani Metals & Alloys Ltd., Kamani Chambers, Nicol Road, Ballard Estate, Bombay-1;
2. Dr. F. R. Goldschmidt	• • •	„	Indian Non-Ferrous Metals Manufacturers' Association, India Exchange, Calcutta-1;
AND			
			Montana Private Ltd., Rahimtoola House, Hornji Street, Bombay-1.
3. Shri C. G. Chandrasekhar	• • •	„	Indian Non-Ferrous Metals Manufacturers' Association, India Exchange, Calcutta-1.
4. Shri B. K. Nevatia	• • •	}	Western India Sheet Rollers' Association, Kamani Chambers, Nicol Road, Ballard Estate, Bombay-1.
5. Dr. C. A. Mehta	• • •		
6. Shri D. K. Bhat	• • •		
7. Mr. G. A. Carver	• • •		
8. Shri T. K. Dutt	• • •	„	Indian Copper Corporation Ltd., Post Box No. 174, Gillander House, Calcutta-1.
9. Shri B. C. Chakravarti	• • •	„	The Metal Corporation of India Ltd., 135, Canning Street, Calcutta-1.
10. Shri B. R. Saraiya	• • •	}	Kamani Metals & Alloys Ltd., Kamani Chambers, Nicol Road, Ballard Estate, Bombay-1.
11. Shri R. Kamani	• • •		
12. Shri P. C. N. Majumdar	• • •		
13. Shri A. K. Shah	• • •	}	The Indian Standard Metal Co. Ltd., Chinchpokli Cross Lane, Bombay-27.
14. Shri F. A. Jasdanwalla	• • •		
15. Shri C. Chatterjee	• • •		
16. Shri Gopaldas Aggarwal	• • •	}	Devidayal Metal Industries (Private) Ltd., Gupta Mills Estate, Bombay-10.
17. Shri Devkumar	• • •		
18. Shri G. D. Binani	• • •	„	The Binani Metal Works Private Ltd., Binani Buildings, 38, Strand Road, Calcutta-1.

CONSUMERS:

36. Shri C. P. Bhatt Representing All India Non-ferrous Metal-ware Manufacturers' Association, Liberty Building, Marine Lines, Bombay;
- AND
- The Southern India Metal Distributors' Association, 127, Mint Street, Madras.
37. Shri R. M. Shah }
 38. Shri J. F. Fernandes } „ All India Non-ferrous Metal-ware Manufacturers' Association, Liberty Building, Marine Lines, Bombay-1.
39. Shri A. H. Baldota „ Bombay Metal Exchange Ltd., Gogate Mansion, Kika St. Bombay-2.
40. Shri H. D. Aggarwal }
 41. Shri B. D. Nagpal } „ All India Stainless Steel Industries Association, 26A, Behind Mumbadevi Post Office, Bombay-2.
42. Shri M. M. Bhawsar }
43. Shri D. N. Panthaki „ C. S. Pochee & Son, 586, Chira Bazar, Girgaum Road, Bombay-2.
44. Shri M. L. Kapur „ Universal Screw Factory, Chheharta, Amritsar.
45. Shri N. D. Sahukar „ Godrej & Boyce Mfg. Co. Private Ltd., Lalbaug, Parel, Bombay-12.
46. Shri C. C. Balu „ C. C. Balu & Co. Private Ltd., 20, Kasturi Building, Jamshej Tata Road, Churchgate, Bombay.
47. Shri O. P. Aggarwal „ Devidayal Stainless Steel Industries Private Ltd., Darukhana-Reay Road, Bombay-10.

GOVERNMENT DEPARTMENTS:

48. Dr. D. P. Antia, Chairman, Development Council for Non-ferrous Metals, c/o National Carbon Company (India) Ltd., 18A, Brabourne Road, Calcutta-1.
49. Shri R. N. Dutt, Additional Iron & Steel Controller, 93, Netaji Subhas Road, Calcutta-1.
50. Shri V. S. Pradhan, Indian Bureau of Mines, Government of India, New Delhi.
51. Shri S. S. Venkatakrishnan, Director of Supplies & Disposals, Sapt Building, Graham Road, Ballard Estate, Bombay-1.
52. Shri C. M. Patel, Superintendent, Ordnance Factory, Ambernath.
53. Shri S. G. Ghosalkar, District Controller of Stores, Central Railway, Matunga, Bombay.
54. Shri A. B. Rao, Assistant Director, I.S.I. Branch, 40/40A, Cowasji Patel Street, Bombay-1.
55. Shri Singh, Appraiser, Office of the Collector of Customs, New Custom House, Bombay.

OTHERS:

56. Mr. A. S. Payne, Assistant U. K. Trade Commissioner, Mercantile Bank Building, Mahatma Gandhi Road, Bombay-1.

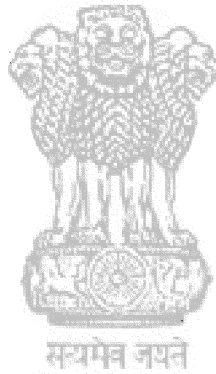
APPENDIX IV

(Vide Paragraph 6.3)

Statement showing production of non-ferrous alloys during 1951—1957 (January—March) as available from the records of the Development Wing

Sl. No.	Name of the alloy	Production (Tons)					
		1951	1952	1953	1954	1955	1956 (Jan-March)
1	Brass	1,229.00	1,015.00	1,086.51	910.73	1,010.05	1,077.49
2	Bronze (General)	1,604.00	568.00	401.30	955.10	967.90	1,529.80
3	Phosphor Bronze	1,610.00	983.00	515.02	765.79	1,006.75	1,097.94
4	Lead Bronze	235.00	69.00	210.60	464.49	562.68	115.40
5	Gun Metal	2,164.00	1,296.00	1,401.59	2,185.61	2,574.63	3,266.85
6	White Metal (including antifriction bearing metal)	2,351.00	1,332.00	1,400.50	2,843.29	2,468.24	2,198.09
7	Antimonial Lead	62.00	Nil	0.10	5.55	890.30	2,361.63
8	Nickel Silver (Shorts & Ingots)	8.00	4.00	0.52	Nil	0.50	Nil
9	Printing & Type Metal	1,376.00	1,452.00	1,242.54	1,282.71	1,405.23	1,310.95
10	Cupro-Nickel	123.00	5.00	Nil	Nil	1.20	6.36
11	Tin Solder	1,211.00	927.00	663.32	1,008.09	1,166.65	1,206.67
12	Resin cored solder wire	4.87	87.50	3.80	16.70	27.53	46.82
13	Silver solder (lbs.)	101.00	Nil	92.00	120.00	68.00	1,903.00
14	Nickel Alloys	91.95	2.30	34.80	91.70	14.05	21.25
15	Bell Metal	220.49	153.05	182.70	187.55	0.85	2.10
							N.A.

49	All Alloys of copper including phosphor copper and cupro-nickel and scraps of such alloys in all form excluding manufactures thereof.	O.G.L. (Gen.)	O.G.L. (Gen.)	O.G.L. (Gen.)	O.G.L. (Gen.)	50% Gen. 50% Soft	Nil	10% Gen. 10% Soft
PART II								
11	German silver, including Nickel silver and scrap thereof.	O.G.L. (Gen.)	O.G.L. (Gen.)	O.G.L. (Gen.)	O.G.L. (Gen.)	50% Gen. 50 % Soft.	<i>Ad hoc</i>	



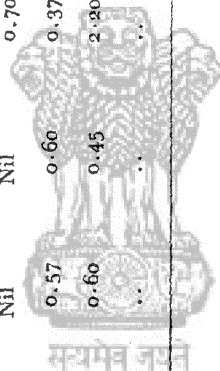
APPENDIX VI

(Vide Paragraph 7.3)

Statement showing production of non-ferrous semi-manufactures by the organised section of the industry in the private sector during 1951—1957 (Jan.-March) as available from the records of the Development Wing

Sl. No.	Name of the manufactured item	Production (tons)								
		1951	1952	1953	1954	1955	1956	1957 (Jan.-March)		
1	2	3	4	5	6	7	8	9		
1	Copper Sheets	4,093.32	759.45	985.16	1,313.26	1,461.55	1,649.66	182.99		
2	Copper circles	401.04	46.25	145.57	149.00	98.40	130.35	95.85		
3	Copper Strips	235.76	135.55	190.45	116.45	138.00	278.93	31.10		
4	Copper Pipes and Tubes	10.00	34.90	43.60	17.00	49.35	44.15	20.70		
5	Copper Rods/Sections	153.75	92.00	104.97	6,291.92	7,868.47	7,871.73	2,752.21		
6	Copper Plates/Pattas	Nil	60.85	—	269.35	6.65	25.15	5.90		
7	Copper wire for non-electrical purposes	277.52	173.10	242.43	330.19	303.30	407.31	62.80		
8	Brass Sheets	9,024.30	7,179.95	8,320.09	12,606.50	10,650.76	99,916.74	3,500.46		
9	Brass Circles	2,203.68	1,205.15	2,645.40	3,045.54	2,400.74	2,599.04	680.89		
10	Brass Strips	442.15	137.00	190.12	154.57	295.41	429.30	40.30		
11	Brass Pipes and Tubes	12.80	4.00	2.75	3.55	13.08	8.05	2.15		
12	Brass Rods and Sections	440.23	346.80	413.29	1,058.46	844.58	1,197.59	388.15		
* 13	Brass Billets/Pattas	2.95	12.30	..	106.45	Nil	Nil	Nil		

14	Brass wire	.	.	.	.	.	61.96	1.55	30.43	35.99	86.36	131.15	64.70
15	Zinc Sheets	.	.	.	.	.	35.64	22.70	34.30	39.05	41.65	90.77	4.65
16	Zinc Strips/Plates	.	.	.	.	.	87.55	25.30	43.15	6.60	21.00	14.45	5.25
17	Lead Sheets	.	.	.	.	.	113.25	43.55	79.25	97.75	102.00	37.75	8.30
18	Lead Pipes and Tubes	.	.	.	.	.	226.45	332.90	310.41	165.44	282.56	340.52	81.64
19	Arsenical copper rods	.	.	.	.	.	169.10	298.05	22.15	215.62	346.40	277.45	21.40
20	Phosphor Bronze rods	.	.	.	.	.	32.54	36.65	36.59	37.68	28.38	29.98	9.36
21	Phosphor Bronze Sheets	.	.	.	.	.	Nil	Nil	0.70	1.18	0.72	Nil	N.A.
22	Phosphor Bronze Strips	.	.	.	.	.	0.57	0.60	0.37	2.69	2.31	4.78	2.05
23	Manganese Bronze Solids (extruded)	.	.	.	.	.	0.60	0.45	2.20	1.85	2.65	31.90	6.65
24	Nickel Anodes	.	.	.	.	.	...	...	...	26.53	38.35	N.A.	N.A.



सत्यमेव जयते

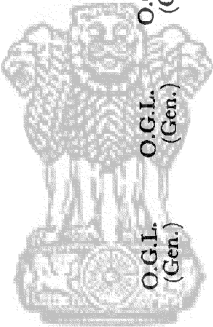
APPENDIX VII

(Vide Paragraph 7.6)

Summary of the Import Control Policy from January—June 1955 to October 1957—March 1958 in respect of Non-ferrous Semi-manufactures

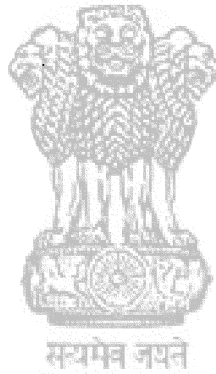
[NOTE.—The import control policy in respect of manufactures is also included in this statement]

Part & Sl. No. of ITC Schedule	Description	1955			1956			1957		October 1957—	Remarks
		January- June	July- December	3	January- June	July- December	6	January- June	July- September	March 58	
1	2	3	4	5	6	7	8	9	10		
PART I											
41	(i) Copper, wrought in the following forms, viz., strip, tape, foil, highly polished sheet specifically prepared for making process blocks, lithographic sheet and copper perforated sheet.	100% Gen.	100% Gen.	100% Gen.	100% Gen.	100% Gen.	75% Gen.	Nil	25% Gen.		
		100% Soft	100% Soft	100% Soft	100% Soft	100% Soft	75% Soft		25% Soft		
	(ii) Copper wrought in the following forms, viz., rod, section, pipes and sheets cut to size, tubes, rods and pipes cut to shape and size.	100%	100%	100%	100%	100% (1)	75% (1)	Nil	25%		(1) <i>Ad hoc</i> licences to A.U.
	(iii) Copper flexible pipes or tubes for passing gas or fluid under pressure.	..	..	O.G.L. (Gen.)	O.G.L. (Gen.)	O.G.L. (Gen.)		Nil*	100% Gen. 100% Soft		
43	Lead wrought including the following, viz., pipe, tubes, foil, wire and sheets including Sheets for tea chests.	75%	75%	75%	75%	75%	75%	Nil*	Nil		

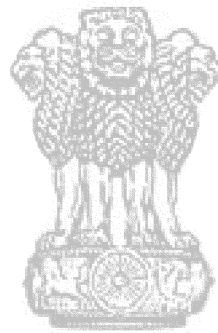
		O.G.L. (Gen.)	O.G.L. (Gen.)	O.G.L. (Gen.)	O.G.L. (Gen.)	O.G.L. (Gen.)	O.G.L. (Gen.)	Ad hoc	85% Gen. 85% Soft
44	Zinc wrought, including wire rods, sections, sheets, including highly polished sheets especially prepared for making process blocks, lithographic sheets and the following manufactures, viz., zinc perforated sheet cut to size.	O.G.L. (Gen.)							
45-A	Tin wrought including the following, viz., foil & wire.	O.G.L. (Soft)	O.G.L. (Soft)	O.G.L. (Soft)	O.G.L. (Soft)	O.G.L. (Soft)	O.G.L. (Soft)	Nil	Nil
46(c)	Brass, bronze and similar alloys wrought including the following, viz., wire, rods, sections, sheet, pipe and tube and the following manufactures, viz., rod and tube cut to shape and size but excluding chemical or imitation gold.	100% (2)	100% (2)	100% (2)	100% (2)	100% (2)	75% (2)	Nil	20%
46(d)	Bronze flexible pipes or tubes for passing gas or fluid under pressure.	..					O.G.L. (Gen.)	Nil*	100% Gen. 100% Soft
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PART II									
Item 10									
Manufactures of copper excluding scrap and those mentioned in Part I of the Schedule:—									
(a)	Rods, wire, foil and strip made of copper for gas welding and brazing.	100% Gen. 100% Soft	100% Gen. 100% Soft	100% Gen. 100% Soft	100% Gen. 100% Soft	100% Gen. 100% Soft	50% Gen. 50% Soft	Nil	10% Gen. 10% Soft
(b)	Copper wire other than bare hard Drawn electrolytic copper wire.	10%	10%	10%	10%	10%	10%	Nil	Nil

(2) *Ad hoc* licence to A. U. for the import of brass rods, sections, pipes and tubes of all sizes in consultation with Development Wing.

1	2	3	4	5	6	7	8	9	10
(c) Others	Nil	Nil	Nil	Nil(3)	Nil(3)	Nil	Nil	Nil	(3) <i>Ad hoc</i> licences to electroplating industry for the import of copper anodes.
15 Zinc or spelter, manufactured, not otherwise specified excluding scraps, and those mentioned in Part I of this Schedule.	10%	10%	10%	10%	10%	Nil	Nil	Nil	
16 Manufacture of brass, bronze and similar alloys, not otherwise specified, excluding scrap and chemicals or imitation gold and those mentioned in Part I of the Schedule.									
(a) Electrodes made of Brass, Bronze and other, similar alloys and rods, foil, wire and strip made of brass, bronze and other similar alloys for gas welding.	O.G.L. (Gen.)	O.G.L. (Gen.)	O.G.L. (Gen.)	100% Gen. Soft	100% Gen. Soft	25% Gen. Soft	Nil	20% Gen. Soft	
(b) Others	100%(4)	100%(4)	100%(4)	75%(4)	75%(4)	40%(4)	Nil	Nil	(4) A.F.U. applications will be considered.



17	(a) Cadmium, cobalt, manganese, magnesium, bismuth, tungsten, molybdenum, silicon, chromium, vanadium and other virgin non-ferrous metals not otherwise specified and manufactures thereof including nickel manufactures and also including monel metal manufactures, dental silver alloy in 1 and 5 oz. packing, aluminium leadwired, glazing bars and magnesium powder, also electrodes, rod, foil, wire and strip, gas welding and brazing but excluding non-ferrous semi-manufactures and alloys.	O.G.L. (Gen.)	O.G.L. (Gen.)	O.G.L. (Gen.)	O.G.L. (Gen.)	Nil*	100% Gen. 100% Soft	*Actual Users licences to both scheduled in- dustries as well as other Actual Users, will be granted for the import of these arti- cles.
(b)	Non-ferrous semi-manufactures.	50% Gen. 50% Soft	50% Gen. 50% Soft	50% Gen. 50% Soft	50% Gen. 50% Soft	Nil	20% Gen. 20% Soft	(5) A. U. applications will be considered.



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