

**PUBLIC ACCOUNTS COMMITTEE
(1972-73)**

(FIFTH LOK SABHA)

SEVENTY-EIGHTH REPORT

**[Paragraphs 35 and 52 of the Report of the Comptroller and Auditor General of India for the year 1970-71—
Union Government (Civil) relating to the Departments of Steel and Science and Technology (CSIR)]**



सत्यमेव जयते

**LOK SABHA SECRETARIAT
NEW DELHI**

March, 1973/Phalguna, 1894 (Saka)

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Corrigenda to Seventy Eighth Report of
Public accounts Committee (Fifth Lok Sabha)
presented to Lok Sabha on the 30th March, 1973.

<u>Page</u>	<u>Para</u>	<u>Line</u>	<u>For</u>	<u>Read</u>
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Minutes of the sittings of the Public
accounts Committee held on :
14-7-1972
12-9-72
21-3-1973

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(1972-73)

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SECRETARIAT

Shri Avtar Singh Rikhy—*Joint Secretary.*

Shri T. R. Krishnamachari—*Under Secretary.*

INTRODUCTION

1, the Chairman of the Public Accounts Committee as authorised by the Committee do present on their behalf this Seventy-Eighth Report of the Committee (Fifth Lok Sabha) on paragraphs 35 and 52 of the Report of the Comptroller and Auditor General of India for the year 1970-71—Union Government (Civil) relating respectively to the Departments of Steel and Science and Technology (CSIR).

2. The Report of the Comptroller and Auditor General of India for the year 1970-71—Union Government (Civil) was laid on the Table on the 7th April, 1972. The Committee examined the paragraphs relating to the Departments of Steel and Science and Technology (CSIR) on the 12th September and 14th July, 1972 respectively.

3. The Committee considered and finalised this Report at their sitting held on the 21st March, 1973. Minutes of the sittings of the Committee form Part II* of the Report.

4. A statement showing the summary of the main conclusions/recommendations of the Committee is appended to the Report (Appendix VI). For facility of reference these have been printed in thick type in the body of the Report.

5. The Committee place on record their appreciation of the assistance rendered to them in the examination of the paragraphs by the Comptroller and Auditor General of India.

6. The Committee would also like to express their thanks to the officers of the Departments of Steel and Science and Technology (CSIR) for the cooperation extended by them in giving information to the Committee.

NEW DELHI;
March 21, 1973.

Phalguna 30, 1894 (Saka).

ERA SEZHIYAN,
Chairman,
Public Accounts Committee.

*Not printed, (One cyclostyled copy laid on the Table of the House and five copies placed in Parliament Library.

CHAPTER I

DEPARTMENT OF SCIENCE & TECHNOLOGY (C.S.I.R.)

Working of the Central Mechanical Engineering Research Institute, Durgapur

1.1. The Committee called for details regarding the inventions/new processes developed by the Central Mechanical Engineering Research Institute, Durgapur since its inception in 1958. From the information made available to the Committee it is seen that as on 1-4-1972, CMERI had released 36 processes/inventions to industry on royalty/premium basis including one process which was given as technical aid to the industry against payment. The Institute has also developed 43 more processes/inventions which were stated to be ready for exploitation. It is further seen that out of the 36 processes/inventions released to the Industry only 13 processes are actually being exploited/utilised.

1.2. The statement (Appendix I) gives details of the premia and royalty received and receivable upto 31-3-1972 in respect of processes developed at C.M.E.R.I. Durgapur and released through NRDC. It is seen from the statement that the total amount of premia and royalty received and receivable upto 31-3-1972 has been estimated at Rs. 2,46,000 and Rs. 2,06,360 respectively. The total value of the products turned out by using the processes/inventions developed at C.M.E.R.I. has been estimated at Rs. 59,75,334. It has also been stated that the total foreign exchange saved may be of the order of Rs. 48 lakhs.

1.3. The Committee were informed that "under an agreement between CSIR and NRDC all inventions of the CSIR have to be licensed through the NRDC unless otherwise exempted in consultation with the Chairman of NRDC. However cases of sponsored research projects or those with the joint participation of the industry are not covered by the agreement."

1.4. The Committee desired to be furnished with a statement giving details of all the processes/inventions directly released by the C.M.E.R.I. since 1958 for exploitation without bringing in NRDC. The statement (Appendix II) furnished by the CSIR indicates that C.M.E.R.I. has released 18 processes, techniques, designs to Industry directly which fall in the following categories:

- (i) Processes initiated and developed by C.M.E.R.I. and released to industry on payment of *ad hoc* fee as technical aid to industry with the approval of D.G.S.I.R.
- (ii) *Ad hoc* designs for quality control test rigs, instruments etc. undertaken on specific requests and released to the parties.
- (iii) Sponsored work undertaken on behalf of industry and released know-how to the concerned parties.

1.5. In all the above cases the C.M.E.R.I. received some fee for the work done. In addition to these works, the C.M.E.R.I. undertakes development of designs of economical structures on specific requests from various parties. The Institute has so far received about 1.10 lakhs as fee from these parties for supply of the drawings for the structures.

1.6. The table below gives details of the total expenditure incurred by the C.M.E.R.I. so far:

(Expenditure in lakhs of rupees, rounded off to 2 decimal)

Year	Recurring	Capital	Total
1958-59	1.40	..	1.40
1959-60	2.58	6.08	8.66
1960-61	4.04	8.22	12.26
1961-62	5.14	3.16	8.30
1962-63	6.50	11.57	18.07
1963-64	9.19	16.04	25.23
1964-65	16.31	15.29	31.60
1965-66	30.02	54.54	84.56
1966-67	41.91	52.47	94.38
1967-68	48.63	43.83	92.46
1968-69	55.33	32.35	87.68
1969-70	50.20	21.86	72.06
1970-71	57.14	21.60	78.74
1971-72	59.21	17.71	76.92
Total	387.60	304.72	692.32

1.7. From the above it is seen that out of total expenditure of about Rs. 6.92 crores, about Rs. 3.87 crores were the recurring expenses of the Institute. During evidence the Committee pointed out that against a total expenditure of Rs. 6.92 crores on the Institute, the results achieved so far were not very satisfactory. In this connection the Director General, CSIR stated: "If I may say so, any student of science, if he is a contented fellow, is no longer a student of science. I can only say that an institution like the C.M.E.R.I. or any other organisation can certainly do better. You may ask me why it could not be better. Here again is a problem. The problem is, how do we evaluate the outputs not only in rupees but in respect of other parameters which are visible or invisible."

1.8. The witness further added: "In a way, we have also environmental parameters, the level at which the industry operates, the level at which research grows, the visible and invisible outputs that come out of the laboratory. Taking all these into consideration, I have the feeling that the C.M.E.R.I. has built for itself some amount of confidence in the engineering industry, and it has also been instrumental in assisting governmental and other agencies. The number of processes is only one of the parameters. What are the social and economic benefits, indirect benefits, what is the awakening that has come in the industry, private or public, which was not amenable to research, what are the impediments which come in the way of the utilisation of the research—all these factors would have to be brought in."

1.9. The Committee desired to know the machinery employed by the Institute for dissemination of information relating to their inventions/processes. In a written note, the CSIR have stated:

The dissemination of information relating to inventions/processes is done in the following manner:—

- (i) Each invention/process assigned to the NRDC is widely publicised in technical journals, journals of trade and industry and daily newspapers.
- (ii) The Institute brings out special bulletins, brochures on processes/products developed which are widely circulated amongst the perspective industrialists and entrepreneurs.
- (iii) The Institute has open days when industrialists and the public are invited to visit the Institute & familiarise themselves with the working of processes and products developed by the Institute.

- (iv) The Institute periodically organises Seminars and Get-together with industry on specialised subjects which are widely attended by industrialists and others.
- (v) The Institute has a Liaison Officer with an Industrial Liaison Section which constantly arranges discussion with the industrialists and visits of scientists of the Institute to industry."

1.10. In reply to a question as to the total amount of royalty/premium realised in respect of the inventions/processes developed by C.M.E.R.I. and commercially exploited as compared with the total expenditure incurred thereon both by the C.M.E.R.I. and the N.R.D.C., the C.S.I.R. stated that the "information required would have to be worked out and is not readily available."

1.11. In this connection the NRDC have in a written note stated:

"There can be no relationship between what has been spent in the research laboratories and which is being obtained by way of premia/royalty by N.R.D.C. The research laboratories have been established not only to develop certain specific processes but they have got a general purpose of developing the technical competence of the country as a whole, training of technical personnel, etc."

1.12. The Committee had an occasion to review certain aspects of the working of the NRDC and the CSIR in 1969-70. In their 122nd Report (4th Lck Sabha) the Public Accounts Committee had made several observations about the wide gap between industrial research carried out in CSIR laboratories and its utilisation. Taking note of the very poor record of utilisation of processes developed in the laboratories, the Committee had suggested that the Board of Scientific and Industrial Research should regularly make a systematic review of the performance of each of the laboratories from the point of view of their contribution to the industrial production.

1.13. From the information made available to the Committee in regard to the working of the Central Mechanical Research Institute, Durgapur the Committee find that during 14 years of its existence the Institute had incurred an expenditure of about Rs. 6.92 crores out of which about Rs. 3.87 crores was of recurring nature. During the same period the Institute had developed about 79 processes/inventions, out of which 36 processes/inventions were released to the industry. Out of the 36 processes released to the industry only 13 processes are actually being exploited/utilised. The total value of the products turned out by using the processes/inventions

developed at the Institute has been estimated at about Rs. 60 lakhs which is stated to have resulted in a saving of foreign exchange of the order of about Rs. 48 lakhs. These figures do not speak much about the achievement of CMERI. The Committee feel that in the ultimate analysis the success or failure of any research laboratory will have to be judged on the basis of its impact on the industrial production and the extent to which its efforts contribute towards the goal of self-reliance in the matter of technical know-how. While the amount realised by way of premia/royalties may not be proportionate to that spent in a research laboratory, in the overall context it will have to be ensured that the expenditure on a laboratory of this nature is commensurate with its contribution towards augmenting production and developing self-reliance particularly in strategic and critical areas. Judged by these criteria the success achieved by the Institute can by no means be said to be satisfactory. The Committee would, therefore, strongly urge the appointment of a Task Force comprising representatives of CSIR/CMERI/NRDC, public undertakings and representatives of leading industrial organisations concerned which manufacture engineering goods, so that the research programme can be suitably reoriented in the interest of rendering maximum technical assistance to industry to achieve self-reliance in the shortest time in strategic and critical areas.

Working of the National Research Development Corporation

1.14. The major aims and objects of the National Research Development Corporation, as set out in the Annual Report of the Corporation for the year 1970-71 are:

“1. To develop and exploit in the public interest for profit or otherwise:

- (i) Inventions, whether patentable or otherwise, of Council of Scientific and Industrial Research including technical and engineering know-how of processes.
- (ii) Patents and inventions of different departments of Government of India and State Government's commodity research committees and other statutory research organisations, including technical and engineering know-how of processes.
- (iii) Such other patents as may be voluntarily assigned by general or special agreement, by universities, research institutions or individuals; and

(iv) Such other processes and patents, the development of which may be entrusted to the Corporation by Government of India.

2. To enter into reciprocal agreement with similar organisations in other countries to exploit Indian inventions in those countries and their inventions in India.

3. To enter into agreement with private firm(s) to develop inventions by trial at their works and to reimburse them any loss that may be incurred during these trials.

4. To instal and work pilot, prototype or semi-scale units or full commercial plants to develop a particular invention or inventions and ensure production from such invention or inventions, to sell or otherwise dispose of the products of such inventions on payment or otherwise and generally on such terms and conditions as may deem fit.

5. To afford facilities for advising and assisting Government departments, universities, research institutions and individuals in filing applications for patent and prosecuting the same before the Controller of Patents and to frame rules for the purpose and to vary them from time to time."

1.15. It is seen from the Annual Report of NRDC for the year 1970-71 that upto 31-3-1971, out of 1214 inventions reported to NRDC by various research organisations, only 368 inventions were licensed on payment of royalty and/or premium. The total value of the production from these processes upto 31-3-1971 has been estimated at Rs. 36.20 crores (Approx). This is stated to have resulted in the saving of foreign exchange of approximately Rs. 28.30 crores.

1.16. The Committee were also informed that out of the 79 inventions referred to NRDC by CMERI till date only 36 processes had been licensed to the industry. Asked to give the reasons for the non-licensing of the remaining inventions, the NRDC has in a written note stated:

"The reasons for the non-licensing of the processes are many and include the following:—

- (i) The inventions may not find a worthwhile application under Indian market conditions.
- (ii) The research might have been started under certain circumstances but by the time it had matured the conditions prevailing would have changed entirely.

- (iii) The manufacture of the product or the item may not give good return to the entrepreneur.
- (iv) The entrepreneur may not have the confidence in the development and may not like to risk his money on such a venture.
- (v) The project might have been taken up but not pursued to the end by the laboratory and not completed and so not attractive to the entrepreneur.
- (vi) Certain processes will have an import content. Obtaining these imported raw materials and components, sometimes, poses great problems.

In this connection it may be worthwhile to mention that it would not be correct to assume that every process that has been worked out in a laboratory will ultimately be in a position to be utilised on a commercial scale. Technology of the process is only a small portion in the entire package for converting a laboratory process into industry. One would say that technology may be only 20 per cent of the total effort required by the entrepreneur to convert a laboratory process into industry. He will have to find necessary capital, physical facilities, obtain necessary licences, build the factory, organise his labour, produce the material and lastly sell it. In a country like ours if a person has necessary capital, it is not necessary for him to invest only in our processes which are not proved on a commercial scale. He would be investing only in areas where he would think he could get maximum return."

1.17. NRDC has an agreement with CSIR for the commercial exploitation of all the processes|inventions developed in CSIR laboratories. Only such items as are agreed upon between the Chairman, NRDC and Director General, CSIR, are exempted from the purview of this agreement. The Committee were informed that it is the joint responsibility of CSIR and NRDC to establish the techno-economic feasibility of the inventions. As regards the machinery employed for dissemination of information relating to inventions/processes, the NRDC has stated:

"NRDC adopts the following methods for bringing these inventions|processes to the notice of interested entrepreneurs for translating them into industry.

- (i) The officers in NRDC have established close liaison with a number of commercial establishments, who, they know, would be interested in some of the processes being developed in CMERI. Immediately a process becomes availa-

ble from CMERI these industrialists are told about it. A preliminary technical note is prepared on the process, printed and circulated among about 500 addresses which include all the Directors of Industries of various States, Small Scale Industries Service Institutes, Industrial Development Corporations of various States, prominent manufacturers in the line, D.G.T.D., Chambers of Commerce, Trade Associations, etc.

- (ii) The preliminary technical note is also sent to a number of technical journals and periodicals who in turn publicise these in their journals and periodicals.
- (iii) NRDC, every 2 months, puts an advertisement in prominent daily newspapers to indicate to the public about the availability of new processes from NRDC.
- (iv) NRDC participates in symposia and seminars organised by learned associations, industry groups, etc., and brings to their notice the work being done in various laboratories and the processes that are available for licensing.
- (v) NRDC publishes every quarter a bulletin of the processes available with NRDC for licensing. This also goes to a large number of people who show interest in NRDC processes.
- (vi) NRDC participates in industrial exhibitions to bring to the notice of visitors to the exhibitions the processes available with NRDC for licensing.
- (vii) NRDC also advertises its processes and activities in technical press.

Except for the exemptions and for the specific projects sponsored by industry, all processes are licensed through NRDC.

The laboratories also have Liaison & Information Divisions that keep in touch with the industry and make known to them the processes available. These Divisions also refer entrepreneurs to NRDC for finalisation of the negotiations and execution of agreements."

1.18. The Director General, CSIR mentioned during evidence before the Committee that when the processes| inventions were referred to NRDC, there was usually some delay varying from "six months to one year or two years or more" before these processes were released to the industry. In a note, the CSIR also stated:

“In a recent review which has been carried out in regard to the inventions referred by CSIR to NRDC it was noted that the time-lag between the inventions emanating from the laboratory and its licensing by NRDC ranges from 4 months to 3 years or more.”

1.19. During evidence when the Committee drew attention to the above statements, the Managing Director, NRDC stated in reply: “The matter of delay is not such a thing whereby one can say that in all cases it can be licensed in a particular time. Sometimes we have done it in one month and sometimes there are a number of processes which have not been licensed at all after years. We cannot say that a process will automatically be licensed because it is available.”

1.20. As regards the time-lag between the reporting of the processes/inventions to NRDC and its licensing and commercial exploitation, the NRDC have in a note stated: “An attempt is being made to go into the reasons by studying some of the processes which have been available with NRDC and which have not yet been commercialised. NRDC itself is preparing a report on this. This report will have details on about 21 processes. This report will be available in a month. The Administrative Staff College of India is also studying this problem as a part of their own programme.”

1.21. One of the objectives of the NRDC is to enter into reciprocal arrangements with similar organisations in other countries to exploit Indian inventions in those countries. Asked whether any of the Indian processes has been leased out, the Managing Director, NRDC stated during evidence:

“So far only two processes have been licensed abroad. One is the Suri Transmission, evolved when Mr. Suri was in the railways. A company in Germany is making use of it. Another is particle board which has been licensed to a party in Malaysia. This party has not yet gone into production.”

1.22. In a note furnished to the Committee, it has been stated that “NRDC has agreements with NRDC, U.K., Research Corporation, New York (USA), Canadian Patents and Development Ltd., Ottawa, Canada, T.N.O. Holland for exploiting NRDC processes abroad.”

1.23. The Committee desired to know whether in accordance with its objectives NRDC had entered into any agreement with private

firm(s) to develop inventions by trial at their works and to reimburse them any loss that may be incurred during these trials. In a note the NRDC has stated:

“NRDC has developed a procedure by which it collaborates with industry to develop a process to a level where it could be taken for commercial exploitation. A list of these processes is given below:

1. Infant Food
2. Protein Isolate
3. Recovery of Potassium Chloride from Distillery Waste
4. Citric Acid
5. Dal Milling Machinery
6. Leather Machinery.

However, NRDC has not so far reimbursed any losses to the parties conducting trials.”

1.24. In a note the NRDC has stated: “NRDC’s mandate is the translating of indigenous know-how into industry. This is a very hard and difficult process as evidenced in other countries also. As it cannot be a profitable occupation and this was realised in the setting of NRDC itself, the organisation was registered under section 25 of the Companies Act, as a non-profit making organisation.”

1.25. The Annual Report of the NRDC for the year 1969-70, while making a general review of the financial working of the organisation states:

“The NRDC has been showing small financial losses every year since its inception. This year, the loss is of the order of Rs. 2.76 lakhs. The losses incurred include the expenditure incurred by the Corporation on developmental projects and losses on pilot plants. Such an amount this year is Rs. 4.23 lakhs.

During the entire period of its existence i.e. sixteen years, the Corporation has incurred administrative expenditure amounting to Rs. 31.47 lakhs and earned a total premium and royalty of Rs. 84.74 lakhs out of which it has retained as its part only Rs. 25.20 lakhs and paid Rs. 59.54 lakhs to the research establishments from where the processes emanate. It has also incurred recurring developmental

expenditure of Rs. 19.38 lakhs and losses suffered on pilot plants to the tune of Rs. 19 lakhs. It can thus be seen that but for losses on developmental projects and pilot plants which are inevitable in an undertaking of this kind, NRDC has been more or less meeting the administrative expenditure. It may be possible that on the intensification of the efforts by NRDC in converting suitable projects into industrial ventures by financing them upto the pilot plant scale or establishing demonstration units, the corporation would make profits at a future date.

1.26. The Annual Report for the subsequent year viz. 1970-71 points out: "There has been a notable break-through in the working of the Corporation in the sense that for the first time there has been a profit. The total accumulated losses which stood at Rs. 36.40 lakhs upto 31st March, 1970 have thus been reduced to Rs. 32.06 lakhs."

1.27. For reducing the losses of the NRDC the Annual Report of the Corporation for the year 1969-70 mentions: "There are only three ways of reducing the losses in the Corporation:

- (i) Reduce time-lag between availability of the process and its licensing.
- (ii) The Corporation should find, develop and finance schemes which will be more productive in regard to premia and royalty realisation.
- (iii) Be allowed to retain a greater percentage of the royalties and premia collected by it."

1.28. Asked what action had been taken on the recommendations concerning NRDC made in the Mudaliar Committee Report on Foreign Collaboration, the Managing Director, NRDC stated during evidence: "Previously, there were only four or five people in NRDC with a scientific or engineering background. This capability is now being strengthened. We have now appointed more people with specialisation in electronics, chemical engineering, mechanical engineering etc. Previously there was no Managing Director. I joined one year and 10 months ago. We are now collaborating with industry more. Joint collaboration agreements on a fifty-fifty basis have been started. More programmes are being thought of in the direction of making the country self-reliant in the technological field and to make the technology that is developed useful immediately. Government have also allotted enough money to undertake this kind of work by putting out pilot plants, demonstration units etc."

1.29. The witness further added: "The Board of Directors of NRDC have decided to supplement its staff and also augment its resources in technical consultancy for drawing of designs, writing of feasibility reports etc. There is a general agreement between CSIR and NRDC to have common nodal point for evaluation of a product or design before it is sold to parties to avoid further problems."

1.30. In their 122nd Report (1969-70), the Committee had inter-alia observed that "one reason for the unsatisfactory utilisation of processes developed in CSIR laboratories is the inadequacy of the National Research Development Corporation, the agency through which the processes are released." From the information now furnished to the Committee it is revealed that the situation has not improved since then. Out of 1214 inventions reported to NRDC upto 31st March, 1971 only 368 inventions were licensed on payment of royalty and/or premium. The total value of the production from these processes has been estimated at about Rs. 36.20 crores, resulting in the saving of foreign exchange of about Rs. 28.30 crores. In the light of the total national industrial output which runs into several thousand crores annually, the NRDC's contribution is too small to have any impact on the total.

1.31. The Committee note that the Corporation has not at all been able to reduce the time-lag between the availability of an invention and its licensing to the industry. According to CSIR's version the delay varies from "4 months to 3 years or more" before the processes reported to NRDC are released to the industry. The Committee were informed that besides the Administrative Staff College of India who were studying this problem as part of their own programme, the Corporation itself was preparing a report on the subject. The Committee would like to be apprised of the action taken on the basis of studies on hand. The Committee feel that there should be a 'built-in' system by which the Corporation reviews at the end of each year in consultation with the Research Institutions concerned the reasons for non-exploitation of the processes so that the shortcomings which are coming in the way of their industrial exploitation could be removed wherever possible without delay. The Committee would like Government to closely examine the working of NRDC with a view to making the Corporation really effective as a channelising agency for research processes developed in national laboratories to reach the production line. The Committee also feel that NRDC should be able to gather from the field the areas where research is required so that this feedback can be put to effective use in framing the research programme of national laboratories from year to year.

1.32. The Committee are also of the view that the Corporation has not been able to achieve any significant success in the matter of realisation of some of its objectives. The Corporation has entered into agreements with some foreign research organisations but so far only two processes developed in India have been licensed abroad. Another objective of the Corporation is to enter into agreements with private firms to develop inventions by trial at their works and to reimburse any loss that may be incurred during these trials. Here also there has been no worthwhile achievement.

1.33. Against this poor record of achievements the Committee find that the Corporation has till the end of 1970-71 accumulated losses amounting to Rs. 32.06 lakhs. For the first time in its existence of 17 years the Corporation made some profit in 1970-71. The Committee stress that NRDC should intensify its endeavours to see that the proven processes and know-how with it are put increasingly to productive use by industry thereby augmenting the earnings of the Corporation by way of royalty/premia to wipe out the losses accumulated over the years.

Collaborative testing and development of filters

Audit Paragraph

1.34. On 1st July, 1966 the Central Mechanical Engineering Research Institute, Durgapur, entered into a contract (through exchange of letters) with a private firm for collaborative testing and development of filters for commercial exploitation. The contract was to run for 10 years (exclusive for 5 years—this meant that the Institute would not sub-licence to others, for the first five years, the process developed) unless terminated by either party.

1.35. The collaboration arrangement provided for payment of royalty at the rate of 1½ per cent of the total sales turnover of the filters by the firm and free testing by the Institute of the filters produced by the firm. The Director of the Institute wrote to the firm in March, 1968 that the National Research Development Corporation would take steps to enter into a licence agreement for the above process. Agreement was signed by the National Research Development Corporation with the firm in February, 1969 effective from 1st July, 1966. The royalty receivable from the firm exclusively by the Council was, therefore, shared with the National Research Development Corporation which got 30 per cent. of the royalty. During 1st July, 1966 to 31st March, 1971 the amount of royalty paid by the firm either to the Institute or to the National Research Development

Corporation was about Rs. 0.65 lakh. This amount has not yet been shared (December 1971). However, the share of National Research Development Corporation works out to Rs. 19,500.

1.36. The Institute expected production of filters worth about Rs. 40 lakhs annually on which royalty @1½ per cent would have been Rs. 0.60 lakh annually. During 1st July, 1966 to 31st March, 1971, the actual realisation of royalty was Rs. 0.65 lakhs only as follows:—

	(Thousands of rupees)
1967-68	31.6
1968-69	14.3
1969-70	9.8
1970-71	9.5

1.37. The firm did not remit the royalty half-yearly nor did it submit audited statements of production contrary to the terms of the agreement. The Institute/National Research Development Corporation did not also charge the stipulated interest @ 9 per cent on the amounts overdue.

1.38. The Institute charged testing fees for testing of filters of other firms at the prescribed rates ranging from Rs. 30 to Rs. 1,000 each. The filters produced by this firm were, however, tested free according to the terms of the agreement. 232 filters of the firm were tested during July, 1966 to November, 1970. Had those filters been of other parties, approximately Rs. 1.06 lakhs (calculated at the rates charged from other firms) would have been recovered by the Institute as testing fees. Normally, testing fees realised by the national laboratories do not exceed the direct costs.

1.39. It was stated by the Council of Scientific and Industrial Research in September, 1971 that "it has now been suggested to the National Research Development Corporation by the Institute that on completion of exclusive period of 5 years i.e. from 1st July, 1971 the agreement with the party may be terminated in view of the fact that the earnings of the Institute in comparison to the work done for the party has been on the very low side". Subsequently in December, 1971 the Council of Scientific and Industrial Research stated that "In spite of our repeated requests National Research Development Corporation has not yet issued any termination notice

to the party. On the contrary, during a recent discussion between the Managing Director, National Research Development Corporation, the Director and the Liaison Officer, Central Mechanical Engineering Research Institute, the Managing Director expressed the view that the agreement should continue otherwise it might reflect on the reputation of the National Research Development Corporation and Central Mechanical Engineering Research Institute. However, no final decision has yet been arrived at in this regard and the agreement in its present form continues."

1.40. Testing of a large number of filters of various types is an essential part of development of filters. Where a large number of filter tests are made, statistical analysis would reveal possible new lines of development of new and improved filters. Under the collaboration arrangement with the firm five types of filters have been developed (upto November, 1970) by the Institute. No step has been taken (1971) by the Institute to lease the processes developed to any other party on the conclusion of the first five years exclusive period of the agreement with the firm.

[Paragraph 52 of the Report of Comptroller & Auditor General of India (Civil) for the year 1970-71]

1.41. It is seen that the contract between CMERI and the private firm which was first entered into through exchange of letters and was subsequently formalised through NRDC contained *inter alia* the following provisions:

- "1. The terms of this agreement is 10 years to be computed from the 1st day of July, 1966 subject to its earlier termination by either side by six months notice in writing."
- "2. In consideration of the payment of the royalty hereinafter specified, and the observance and performance by the Grantee of the covenants herein contained and on his part to be observed and performed, Grantee shall have the licence for the know-how developed by the Institute for the manufacture of the filters and such licence shall comprise the right to use any know-how if and when developed for the manufacture of the filters at the Grantee's own factory and to sell the products manufactured in accordance with the said invention."

"4(i) During the period of the said term the Grantee will pay to the Corporation for 10 years a royalty at the rate of 1½ per cent on the net ex-factory sale price of the filters manufactured by it and

marketed by it. Such royalties shall become due on the First of April and on the First of October in every year in respect of the filters manufactured and marketed or used by the Grantee during the preceding half year and shall be paid by the First day of May and First day of November of that year. In default of payment of such royalties on the due dates, the Grantee shall pay interest on the amount in default at the rate of nine per cent per annum;

It will not be open to the Grantee to claim any exemption in the payment of royalty accruing under this clause on the plea of having effected any improvement upon the know-how or on the plea that the products to be manufactured under the know-how have been manufactured by using a different process. This will be applicable to all such filters which have come to a satisfactory standard as per report and findings of the Institute."

* * * * *

"(iii) The Grantee will, within fourteen days of each one of the two days hereinbefore fixed for payment of the royalties, deliver to the Corporation, its attorneys, or duly authorised agents, a true and complete statement, in writing of all filters manufactured and marketed by the Grantee during the preceding half year and of all royalties payable to the Corporation in respect thereof duly certified by the Auditor of the Grantee or provisionally by one of the directors of the Grantee, if the auditor could not certify within due date and will, if and when required by the Corporation, verify such accounts by reference to books and vouchers;"

* * * * *

"(v) The Grantee will employ its best endeavour to work the know-how developed by the Institute and sell filters on a commercial scale within India to meet the demand for filters to adequate extent and at prices to be fixed by the Grantee;"

* * * * *

"5(iv) The Institute will undertake development for the Grantee of the filters and furnish the Grantee test reports and their conclusions and developmental advice."

"(v) The Institute will make available such facilities to take up developments of an adequate number of filters per month (12 lube, 12 fuel, 4 air, 4 hydraulic) to meet the developmental requirement of the Grantee and for technical guidance for improvement and maintenance of international standard and quality of the product."

“(vi) The Institute will keep their developmental facilities and procedure upto date to conform to the accepted specifications standard.”

“(vii) The Institute will have access to the manufacturing facilities of the Grantee and similarly the Grantee will also have access to the Institute's testing facilities, but not to the test data of the filters of other parties tested by the Institute. The benefit of the experience and knowledge gained by the Institute will however be made available to the Grantee.”

“(viii) Notwithstanding that agreement is exclusive for a period of five years, this does not prevent the Institute to undertake during this period testing on behalf of any other party, but development work will be done exclusively for the Grantee.”

1.42. Under an agreement between CSIR and NRDC all inventions of the CSIR have to be licensed through the NRDC unless otherwise exempted in consultation with the Chairman of the NRDC. However, cases of sponsored research projects or those with the joint participation of the industry are not covered by the agreement. The Director General. CSIR informed the Committee during evidence: “Usually, all the processes and inventions, whether patented or unpatented, which are to be sold are to be processed by the NRDC and the NRDC gets about 30 per cent of the royalties, and the balance of the 70 per cent goes to the CSIR and of this, 40 per cent goes to the concerned laboratory and 30 per cent to the inventors.”

1.43. Giving details of the processes not covered by the agreement between NRDC and CSIR, a representative of the CSIR stated:

“There are two types of processes which are not covered by the agreement—sponsored and collaborative research. In the case of the sponsored research, the party approaches the laboratory, indicates its objective and pays for the research. In that case, the results are directly transmitted to the party and the NRDC is not brought into the picture. In the collaborative research, the party and the laboratory work jointly.”

1.44. Referring to the agreement mentioned in the Audit para, the witness further added: “The type of agreement that is just now being discussed is of this type. The party approached the laboratory in 1966 for improvement and standardisation of some filters. Therefore, at that time it was outside the purview of the NRDC.

But we had the discretion to request the NRDC to take over and make the collection of royalty. The CMERI was the first laboratory to indulge in large-scale experimentation on collaborative research projects."

1.45. The Committee pointed out during evidence that even where collaborative research was involved the NRDC should be associated from the beginning because at some stage or the other collaborative research must lead to negotiations of a commercial nature. Asked whether laboratories/institutes would be instructed accordingly, the Director General, CSIR stated: "No Sir. The reason is this. Supposing I am going to sell something or collect royalties; I would consider it wiser to involve the NRDC. Otherwise there is no necessity to involve them."

1.46. The witness further added: "As long as I am corresponding with an industry or a party for conducting research jointly or independently, fully paid or partly paid, it is only at the time of settling royalty or collecting money I would like to involve NRDC; not till then."

1.47. The Committee desired to know how the firm M/s.... was selected by the Institute. In this connection the CSIR have stated:

"M/s... approached CMERI with the proposal for collaborative developmental testing of filters of various types required in India and abroad. It was part of CMERI's programme to set up a full fledged modern filter testing laboratory to help industry. This collaboration at this juncture was considered to be of help to the Institute in obtaining the required data in filter technology and advising not only M/s.... but also other manufacturers. The proposal was put up to the CMERI Advisory Committee and the Executive Council at their meetings on 24th September, 1965 and 24th March, 1966 respectively and was duly approved by them."

1.48. It is seen from the circular letter No. 2/68/68-CDN, dated the 20th November, 1968 issued by the CSIR and addressed to Heads of all Laboratories/Institutes that the rights for all processes and know-how developed in the CSIR laboratories vest in the CSIR and not in individual laboratories. It also states that "the laboratories/institutes should obtain the approval of DGSIR before handing over a process or know-how for exploitation to a private party or NRDC and the processes or know-how developed in a CSIR laboratory for commercial exploitation cannot be leased out without obtaining the approval of the DGSIR." Asked whether in 1966 when the private firm approached CMERI, specific approval of CSIR was obtained before entering into the agreement, the CSIR

have in a note stated: "Before placing this proposal to the Advisory Committee, a note relating to it was prepared and circulated amongst the members of the Advisory Committee (vide our letter No. TIL-65|LCC|4 dated 17.8.65) of which the Scientist-in-charge, Research Coordination and Industrial Liaison Division of the CSIR was one of the Members. The proceedings of the Advisory Committee meeting held on 24-9-1965 were duly approved by the Executive Council in its meeting, held on 24-3-1966. DGSIR is an ex-officio member of the Executive Council and this particular meeting was presided over by him. As the proceedings were approved by CSIR, their formal approval was assumed."

1.49. The Audit para states that the agreement entered into between the Institute and the private party in 1966 was subsequently referred to NRDC in 1968. Explaining the circumstances under which the agreement was referred to NRDC in 1968, the Director General, CSIR stated during evidence: "If it is a sponsored research project, which is between the party and the Institute, the information for which this sponsored research is paid for by the party goes directly to the party, in which case the NRDC is not consulted and it is not necessary. In this particular case at that time there was what is called a Process Release Committee which went into the details of the party and its capacity and they recommended that this may be released to party X or Y and then the approval of the Executive Council was obtained. Therefore, on that basis they proceeded. But they were told by the CSIR that while it was all right, still, it had to be regularised by the NRDC and therefore it was brought back to the NRDC for regularisation."

1.50. In a note furnished at the instance of the Committee, the CSIR have stated:

"The collaborative agreement between CMERI and the firm in question took effect from 1st July, 1966, after holding a meeting in CMERI on 16th June, 1966. This type of collaboration is not covered by the NRDC—CSIR agreement, as it is a collaborative project. However, the CMERI felt that the Institute was ill-equipped with regard to the collection of money against royalty as it involved considerable amount of paper work, besides keeping track of products manufactured and sold by the firm. Accordingly the agreement was referred to NRDC for taking follow up action."

1.51. During evidence the Committee enquired why the agreement between the firm and the CMERI was not referred to NRDC in the very beginning. To this the Director General, CSIR replied: "I must say at the very beginning clearly that it would have been cleaner and"

healthier business if the NRDC was there in the beginning. Let me be clear about this.

When you are entering into a collaborative agreement, you are entering into an agreement to develop some product, or improve a product, for which the party agrees to pay a certain percentage or a lumpsum and for royalty later on. When it is a question of selling of know-how or receiving royalties, the laboratory has not either the wherewithal or organisation to do that. On the other hand, NRDC could do it well. They generally get 30 per cent of royalty collected from the party. Therefore, in 1968, it was thought wiser that this should be brought under the umbrella of NRDC and it was asked to enter into a contract."

1.52. In reply to a question the witness further added: "In this case royalty was involved. That is why I said it would have been probably wiser if NRDC was involved from the beginning itself. Wherever there is royalty included in the original agreement, they should be associated."

1.53. The statement (Appendix III) furnished by CSIR at the instance of the Committee gives details regarding the processes/inventions of CMERI released to the industry so far by NRDC and the terms and conditions attached to them. It is seen that except in the case of filters where the agreed rate of royalty was 1½ per cent without any lumpsum payment in the form of premium, in all other cases the rate of royalty was more than 1½ per cent and actually ranged between 2 per cent and 5 per cent. Besides in most of the cases premia in the form of lumpsum amounts had also been collected. When the Committee pointed this out during evidence, the Director General, CSIR deposed: "There is no particular way of saying that every case must have a lumpsum or two per cent more or two per cent less. It is left to the Board of Directors of NRDC who do it in consultation with the Director of the Institute".

1.54. The Committee desired to know how the amount of royalty and premium realisable on the processes licensed to industry was fixed. During evidence the Director General, CSIR explained: "Usually, the Director and his colleagues who are involved in this have a general idea about the amount involved in the invention and the expenditure involved. There is no definite yardstick to say that this is the format, but some approximate ideas are available and one would know what amount of royalties would accrue over a period of ten or fourteen years, what the lumpsum to be paid would be and so on. These are generally indicated to the NRDC. The NRDC then

hawks it round to a number of parties, as it were, and they accept the best of the terms, provided the NRDC is sure that that party is a capable party."

1.55. In reply to another question the witness added: "I would like to point out that the mechanism or the methodology for the charging of royalties at a certain percentage is a difficult one. There are no regular yardsticks. But one would like to have an indicator at least to show whether it is right or wrong. It is essential to know the capacity of the party, the donor and the acceptor. The NRDC sends out the particulars to everybody. Some quote three per cent and some others quote five per cent. Sometimes we accept five per cent; this also happens."

1.56. In the same context the NRDC has in a written note stated: "There can be no set formula for fixing premium and royalty on the processes released through NRDC. There are many factors, like demand of the product, the stage to which the work has been done, marketability and profitability of the product, advantages over the existing process, cost of research, general policy of the Government in assisting the small scale sector, etc., acceptability of the terms by interested parties. All these factors have to be taken into consideration before fixing up the terms and conditions for premia and royalty. Although attempts have been made from time to time to bring together all these factors into a definite formula, these attempts have not succeeded. The terms are decided on the basis of negotiations with the prospective entrepreneurs and NRDC's endeavour to get the best terms subject to Government policy. Out of the total receipts, 70 per cent goes to the establishments where the researches have been done."

1.57. The Committee enquired whether at the time of fixing royalty at 1½ per cent in the case under reference the probable cost of free testing of filters was worked out and whether any cost sheets were prepared. The Director General, CSIR stated in evidence: "I do not know about the NRDC, but in the CSIR, these cost-sheets are generally not there even now. It is a sort of approximate estimate of the money spent and the income that might come during five-year or ten-year period, the competitive nature of the field, how long the item can be sold and so on. That sort of general idea is there."

1.58. Asked whether at the time of fixing the rate of royalty, the fact that the CMERI would be required to test all the filters produced

by the firm free of cost was considered, the witness stated: "There are two issues. First of all, the contract says that the party will send not exceeding 32 filters per month for testing. So, there is a limitation on this testing. Actually, the institute is doing hardly 4 to 5 per month, according to the average worked out by us. If the party wanted its pound of flesh, it could have sent 32.

The second question is why testing is done free and why it could not be charged separately in addition to the royalty. This is developmental project on filters with a view to improve upon the existing filters. So, before improving the filters we have to test them. Therefore, this is a part of the research programme, part of the developmental project. When they give us the samples we would test and analyse them and on the basis of the statistical analysis we will consider whether there is a possibility to improve or even to develop a new one."

1.59. The table below gives the break-up of the tests made by CMERI in different years on the filters produced by the firm:

Tests	1966	1967	1968	1969	1970 upto November	Total
1 Lube Oil filter	22	26	19	4	15	86
2 Lube oil filter (diesel loco) .		1	6	11	9	27
						(only flow test)
3 Brust test for Lube oil filter		6		..		6
4 Fuel oil filter	17	26	2	9	24	78
						(including one for pressure drop only)
5 Fuel oil filter (diesel loco) .		..	4	2	12	18
6 Air filter . . . .	..	1	2	3	2	8
7 Media testing . . . .	..	..	..		9	9
Total :. . . .	39	60	33	29	71	232

1.60. The details of the filters tested by CMERI for outside parties during the same period are given in the undermentioned statement:

Tests	1966-67	1967-68	1968-69	1969-70	1970 Apr. to sept.)	Total
1 Fuel oil filter	6	26	17	9	2	60
2 Lube oil filter	4	19	21	20	7	71
3 Air filter		7	19	32	12	70
4 Fuel oil filter (diesel loco) .		3		5		8
5 Lube oil filter (diesel loco) .		3	3	4	4	14
6 Filter media		7		1	4	12
7 Aviation filter . . . . .	..	..	..	..	1	1
Total	10	65	60	71	30	236
V Amount recieved Rs.	4,00/-	27,400/-	25,100/-	30,668/-	14,280/-	1,01,448

1.61. The Committee were informed that the CMERI have got capacity of testing approximately 180 filters per year including all types of filters and media. The cost of creation of this capacity was stated to be around Rs. 1.8 lakhs distributed over the period from 1963 to 1972. During evidence the Director General CSIR stated: "According to the agreement, the company is supposed to send us 32 filters a month. According to the knowledge I have from the Institute, there is no capacity to test 32 filters. Fortunately for both the Institute and the Party and to the CSIR all put together, the party has been sending us only 5 or 6 filters for testing. This has enabled the Institute not only to accept the party's samples but an equal amount of samples from others."

1.62. The Audit para states that the Institute expected production of filters by the firm worth about Rs. 40 lakhs annually on which royalty @1½ per cent would have been 0.60 lakhs annually. The amount of royalty paid and payable by the firm is given in the

following statement furnished by CSIR:

Period	Royalty Amount (Rs.)	When paid	Whether audited or not	When audited recd :	Remarks
1.7.66 to 31.3.67	42,334.54	10,000	4.5.67		Audited recd.
		10,000	14.7.67		"
		10,000	7.10.67		"
		11,324.54	27.6.69		"
1.4.68 to 31.3.69	12,848.67	3,000.00	1.6.68		(Rs. 3000/- paid to the Institute)
1.4.69 to 30.9.69		9,848.67	30.1.70	Not	
1.10.69 to 31.3.71		No Information			
1.4.70 to 31.3.71	9,475.65	9,475.65	26.4.71	Not	
1.4.71 to 30.9.71		No information			
1.10.71 to 31.3.72		No information			

1.63. During evidence when the Committee drew attention to the small amounts collected as royalty against the expectation of Rs. 60,000 per annum, the Director General, CSIR stated: "The calculation made has gone wrong in two items. One is with regard to the total sales that were expected of this firm. Other companies and competitors might have come and the sale value might have gone up. Secondly, the calculations might have gone wrong for this reason; namely, at that time one would have calculated the cost per sample; it might cost Rs. 300. Today, after five years, it might be costing Rs. 500 or even Rs. 1000. Whether that aspect was taken into consideration or not is a problem. If I were wise in the calculations, I would have taken into account a higher value for my charging it and a lower value for the total sales. On that, I should calculate the royalty. This should have been the general common sense about it, but whether this exercise had been gone into or not—it has proved to be wrong now—I am sorry I have no data to offer now."

1.64. The Committee pointed out that if instead of entering into agreement with the firm...CMERI had undertaken testing of filters from other parties at the prescribed rates, the Institute would have made profits instead of loss. To this the Director General, CSIR replied: "First of all, I do not accept that there is a loss. The reason is that even if I tested the samples, I should"

have got only one lakh of rupees. As already informed, I have got 60,000 rupees already and NRDC assures me that more money will accrue."

1.65. The Committee desired to know whether Government had assessed the extent of benefit derived by the firm under the agreement and whether the amount of royalty was commensurate with the benefit derived by the firm. In a written note, the CSIR stated: "The interest of CMERI in the present contract embraced mainly the following areas:

- (i) Acquisition of knowledge on the developmental, manufacturing and general performance of various types of filters.
- (ii) To develop filter testing facilities for industry.
- (iii) Data thus acquired for the selection of suitable quality filters media may subsequently help in giving performance know-how of filter elements, if any, to other firm who proposes to manufacture the same at a later stage. (Paper medium is being imported still today from foreign countries).
- (iv) Import substitution. While the question of collaboration was under negotiation, the Defence Department also approached CMERI, for the development and testing of filters which encouraged CMERI to follow their proposal. A meeting was held in the Air-headquarters on 20-10-1965 with the officers of Air headquarters and DGTD. The representative of M/s.... was also present and the requirement and importance of such type of filters in the country was brought out by M/s.....

The agreement is for joint developmental tests. There is gain of knowledge on both sides. It is difficult to assess the benefits in quantitative terms. The royalty of 1½ per cent was negotiated and fixed on this basis, considering that this was the only party with foreign know-how who offered to collaborate with CMERI in their import substitution programme."

1.66. The Committee desired to know the action taken against the firm who have violated the terms of agreement by not paying the royalty amount regularly. The Managing Director, NRDC stated: "It is a fact that their factory was under lock-out and it is also a fact that they have given certain statements—provisional statements."

"From August, 1970, it is closed. Until I am sure that I am able to get that thing from them I cannot take action on that because they have given the provisional statements etc. They can always go to the court and say that these people have not implemented their part, that they have been able to give returns which were available with them etc. About profit and loss, still 5 years of this contract have to go. If I get the returns on these three periods and also if I take the accounts with regard to the total filters that have been made, then only we will be able to take a decision. That is my humble opinion. In my opinion, it would have been a little one sided if I had said 'we will give notice to you and we will terminate it'."

1.67. In the same context, the Director General, CSIR stated: "From the CSIR point of view, if the NRDC is not clear about collecting 1½ per cent royalties on the total sales and they are not able to collect it, then our stand is very clear namely that we do not want to have anything to do with this firm. But supposing the NRDC says that they are in a position to collect it, then the position is different; what the Managing Director, NRDC was trying to mention was this; the original contract permits us to continue to collect royalties for the next five years also on the same know-how that we had originally given. Supposing the contract is terminated, then the continuing royalties which would at the moment come to the institution may not be coming. I think this was the point that he was trying to make."

1.68. It is seen that the agreement was exclusive for 5 years with effect from 1.7.1966 and thereafter it became non-exclusive. From the information available with the Committee it is noticed that the CMERI has been impressing upon the NRDC to terminate the contract with the firm. The reasons for this have been given in the following note sent by NRDC to the legal adviser:

"The Director, Central Mechanical Engineering Research Institute, Durgapur requested NRDC to terminate the agreement with M/s. . . . under the Clause I of the licence agreement by giving six months notice in writing to the firm due to the following reasons:

1. The Institute has to incur heavy expenses on the testing of the filters as compared to the royalties the firm is paying.
2. The firm has not submitted the audited royalty return after the period 31-3-1969. The firm has further sub-

mitted the provisional royalty return for the period 1-4-1970 to 31-3-1971. The firm has pointed out that they are not in a position to submit the audited royalty return as their factory at Calcutta is closed since 17th August, 1971 and they are having no access to their accounts books.

L.A. is requested to give his opinion whether the licence agreement can be terminated by giving six months notice. If so, L.A. is requested to draft a notice to be given to the firm."

The Legal Adviser has offered the following comments:

"Under Clause 1 of the agreement, the Corporation has power to terminate the agreement by 6 months notice. Therefore, the matter is entirely for the Corporation to consider and decide. I must only point out that in the event of the Corporation not having realised the full royalties accruing, the termination of the agreement will naturally create complication in recovery thereof."

1.69. In a note subsequently furnished at the instance of the Committee, the NRDC has stated:

"There is hardly any case where an agreement signed between NRDC and the firm for the transfer of know-how is terminated after an exclusive period. This is because there is no real advantage to NRDC in doing so as once the know-how is given to a party, the party continues to pay and use this know-how for the manufacture of the goods and know-how. If the agreement is terminated, the only result will be the firm will not be liable to pay royalty while continuing to manufacture the item. This is especially so in the case of non-patented items like filters. However, the agreement is converted as non-exclusive and is offered to more parties. Given below are some cases where the party continue to have on non-exclusive basis licence after the expiry of the exclusive period:

1. Sodium Metal.
2. Nickel Cadmium Batteries.
3. Pot-Cheenite.
4. Pulp Cement Sheets.
5. Potassium Cryolite.
6. Silver Oxide Zinc Batteries."

1.70. Giving the present position of the working of the agreement, the CSIR have stated: "As per our agreement with the firm, they are required to send six monthly audited statements of their production and sales of the filters alongwith the amount of royalty due to NRDC. No royalty returns were submitted by the firm on 30-9-1969. When this was pointed out to the firm by NRDC the firm explained that due to labour trouble in the factory their factory was under lockout and their Calcutta Office had ceased to function with effect from 17th of August, 1970. The firm was then requested to send provisional royalty statements alongwith remittance which the firm did on 26th October, 1971. In order to settle outstanding dues, a meeting was convened in the Office of NRDC on 3-7-1972 where the representatives of the firm, NRDC and CMERI were present. Representatives of M/s. informed that their factory has started functioning from 22nd May, 1972 and it will take a few months for production to actually begin. When NRDC pointed out to the firm's representative about the outstanding dues and royalty returns he informed that we would be submitting these in 1972, on returning from his foreign tour. He further emphasised that as the Institute has not kept its promise and the firm has suffered heavy losses due to the stoppage of the testing by the Institute, he would like this matter to be arbitrated by the Director General, CSIR and Managing Director, NRDC. The minutes of the meeting along with the legal opinion sought was placed before the Board of Directors of NRDC at their meeting held on 7-9-1972. The Board at that meeting decided that Director General, CSIR and Managing Director, NRDC should arbitrate this matter. Necessary steps are being taken."

1.71. The Committee understand from Audit that under the collaboration agreement with the firm five types of filters were developed by the Institute. Asked whether the know-how for these newly developed filters had been leased out to other parties after the expiry of the exclusive period of 5 years, the Director General, CSIR stated: "Those offers are being explored; I was assured by the Director that he was contacting the other firms and so on."

1.72. Regarding the efforts made by NRDC in this regard, the Managing Director, NRDC stated during evidence: "So far, it has not been advertised. We have to advertise it again."

1.73. In reply to a question the witness added: "It is not an easy thing to sell know-how because this is an item which so many other people in the country are doing and where there is so much of foreign collaboration."

1.74. The Committee are not happy about the working of the agreement between the NRDC and the private firm for the collaborative testing of filters of the firms by the Central Mechanical Research Institute, Durgapur. In the Committee's view the agreement suffered from the following two lacunae:

- (i) Under the arrangements agreed to with the firm, the Institute was required to make available facilities for taking up development of 32 filters per month. According to the information furnished to the Committee, the Institute has a capacity of testing approximately 180 filters per year or 15 filters per month. This capacity was stated to have been created over a period from 1963 to 1972. Therefore, at the time of entering into the agreement in 1966, the Institute did not have the capacity to test 32 filters as had been stipulated in the contract. The firm has sought arbitration alleging that "Institute has not kept its promise and the firm has suffered heavy losses due to the stoppage of the testing by the Institute."
- (ii) The other major defect would appear to be the very low rate of royalty of $1\frac{1}{2}$ per cent payable by the firm. It is seen that in all other cases where the inventions/processes of the Institute have been licensed to the industry the rate of royalty payable by the licencees mostly ranges between 2 to 5 per cent in addition to a lumpsum payment in the form of premium. In this case the rate of royalty has been fixed at $1\frac{1}{2}$ per cent only on sales. Moreover, there is no payment of premium as in other cases.

1.75. The Committee are also unhappy to note that whereas the Institute expected to earn annually a royalty of about Rs. 0.60 lakhs on an expected production of filters worth about Rs. 40 lakhs, the actual realisation on account of royalty, during the first 5 years of the working of the agreement, has been of the order of Rs. 64,649 only. During evidence it was stated that the firm had not been able to submit a complete account of their sales etc. because it remained closed from August, 1970 to April, 1972 and hence the exact amount recoverable from the firm had not been finally determined. The Committee would like the NRDC to take speedy action to work out the amount due from the firm and take necessary steps for its recovery in full.

.. 1.76. Now that the exclusive period of 5 years is over, the Committee desire that the NRDC should in concert with the Institute explore the feasibility of leasing out the 5 processes so far developed to other suitable parties.

1.77. The Committee note that in terms of an agreement between CSIR and the NRDC all processes/inventions developed in CSIR laboratories are licensed through NRDC for commercial exploitation. This agreement, however, does not cover sponsored and collaborative researches undertaken by the laboratories. As has been revealed by the working of the agreement between CMERI and the private firm, the laboratories/institutes do not have the necessary expertise to sell the know-how or collect the royalties etc. The Committee are, therefore, of the opinion that commercial exploitation of all the processes/inventions developed by the laboratories/institutes of the CSIR should be done preferably by the NRDC or in close consultation with the Corporation from the very beginning and this should be irrespective of the fact whether such processes/inventions come under the category of sponsored or collaborative researches.

CHAPTER II

MINISTRY OF STEEL AND MINES

(DEPARTMENT OF STEEL)

Purchase of dog spikes

Audit paragraph.

2.1. Against the tender enquiry issued on 12th January, 1970 for supply of four items of dog spikes required by various railways, eight offers were received and opened by the Director General, Supplies and Disposals, on 5th February, 1970. The offers of two firm, firm 'A', a registered firm, and firm 'B', an unregistered firm whose capacity was certified by the Director of Inspection New Delhi, for placement of a trial order to the extent of 610 tonnes, were subject to receipt of billets against essentiality certificates to be issued by the Directorate General of Supplies and Disposals.

2.2. The firms were not registered as re-rollers with the Iron & Steel Controller Calcutta. The Director General, Supplies and Disposals, was, therefore, doubtful about their eligibility to receive billets from the main producers. At the time of placing a quota of 3,000 tonnes per month from January, 1970, the Ministry of Steel and Heavy Engineering had stated (December, 1969) that this quantity would be released to nominees of the Director General, Supplies and Disposals, for executing contracts placed on them; it did not make any distinction between registered and unregistered re-rollers. The Director General, Supplies and Disposals, enquired in March, 1970 from the Iron and Steel Controller whether essentially certificate for billets could be issued to the two firms. In April, 1970, the Iron and Steel Controller informed the Directorate that the Joint Plant Committee which control the distribution of billets might be approached in the matter and that in regard to issue of essentiality certificate for billets required by firm 'B' (which was registered with the Director of Industries, Punjab) a reference might be made to the Ministry of Steel and Heavy Engineering.

2.3. On 1st May, 1970, the Director General, Supplies and Disposals, took up the matter with the Ministry of Steel and Heavy Engineering and issued reminders on 13th May, 1970, 23rd June.

1970 and 28th July, 1970. The Ministry of Steel and Heavy Engineering stated that the letter dated 1st May, 1970 did not appear to have been received by it. The reminder dated 13th May, 1970 (with which a copy of the letter of 1st May, 1970 was also sent) was received by that Ministry; action was taken in the matter only after receipt of the letter dated 23rd June, 1970 and only in September, 1970 did that Ministry inform the Director General, Supplies and Disposals, that it was upto the latter to recommend release of billets to any fabricator, whether the re-roller was registered or not. In the meantime, offers of firm 'A' and 'B' which were under consideration for coverage of 1,200 tonnes and 610 tonnes respectively, expired on the 5th August, 1970.

2.4. On the basis of a fresh tender enquiry issued on 2nd July, 1970 (tenders in response to which were received and opened on 11th August, 1970), the stores were purchased in January, 1971 from the same firms 'A' and 'B' at higher rates. The rates tendered by the firms 'A' and 'B' against the earlier and present tender enquiries are shown below:

Item No. of Stores.	Firm 'A'		Firm 'B'	
	Rates offered against tender enquiry dated		Rates offered against tender enquiry dated	
	12th January, 1970	2nd July, 1970	12th January, 1970	2nd July, 1970
	Rate per 50 Kg.		Rate per 50 Kgs.	
	Rs.	Rs.	Rs.	Rs.
1.	79.50	88.15	73.73	78.85
2.	80.25	88.85	73.73	78.85
3.	81.00	89.90	76.73	79.85
4.	81.50	90.50	78.73	79.85
	f. o. r. Calcutta		f. o. r. Jullundur.	

Consequently, Government had to incur extra expenditure of Rs. 2.69 lakhs on the purchase of stores.

2.5. The Ministry of Steel and Mines stated (November, 1971) that it would appear from the distribution policy of billets for 1970-71, (announced on 27th April, 1970) distribution from the quota of the Director General, Supplies and Disposals, was to be made on the basis of recommendatory letters issued by him and as there was no distinction therein between registered and un-registered- re-

rollers, the Director General, Supplies and Disposals, would have been quite justified in issuing recommendatory letter for both the firms.

[Paragraph 35 of the Report of C. & A. G. (Civil) for 1970-71].

2.6. The Committee were informed during evidence that after the works programmes of various zonal Railways have been approved by the Railway Board, each Railway Administration place an indent on the DGS & D for their requirements of track fittings such as dog spikes. The indents from the various Zonal Railways were combined by DGS & D who also take further action for the procurement of these fittings. In this connection, a representative of the Ministry of Supply explained: "The procedure being followed by the DGS & D is this. There is a programme book which indicates items to be purchased, through the Central Purchase Organisation. It shows the dates by which indents should be placed by various Railways on the DGS & D. So far as annual indents are concerned, we receive bulk demands from the various Railways by the target date and after that we issue invitation to tender. It is on this basis that the tender enquiries for 1969-70 and 1970-71 demands were issued."

2.7. From the information made available to the Committee it is seen that based on the indents received from various Railways for their 1969-70 requirements of dog spikes, the DGS & D issued tender notice on 14-4-1969 and the 13 tenders received in response to this notice were opened on 30-5-1969. The details of the total quantity of dog spikes for which tenders were called and opened on 30-5-1969 are given below:

Item No.	Description	Quantity M/T	
1	Dog Spikes to RDSO Drg. No. T-276/M	107	± 25% percentage
2	do. No. T-277/M	628·756	± 25 percentage
3	do. No. T-278/M	927·708	± 25 percent age
4	do. No. T-279/M	577·961	± 25 percentage
	Total—	<u>2241·425</u>	± 25 percentage

2.8. The DGS & D, however, took a decision on 1-12-1969 to allow the tenders for 'Dog Spikes for the Railways' 1969-70 requirements opened on 30-5-1969 to lapse.

2.9. During evidence a representative of the DGS & D deposed: "Those tenders were scrapped and allowed to lapse. After obtaining the allocation in December, 1969 we went out to tender in January and it was opened in February, 1970.

We could not proceed with the earlier tender because our quota had been abruptly cut and we had to follow up with the Steel Ministry to revive the quota."

2.10. The circumstances leading to this decision are explained in the note dated 2-12-1969 recorded in the relevant purchase file of DGS & D. The relevant extracts from the note are reproduced below:

"In this case of Dog Spikes, tenders were opened on 30-5-1969, 13 offers were received. We were considering placing orders on 5 lowest firms subject to settlement of certain terms and conditions, firms confirming validity of their offers upto 30-11-1969 and restoration of DGS & D quota for billets."

"Out of the 3 major parties viz. M/s. have not confirmed validity of their offers even beyond 30-9-1969 and M/s.....have already withdrawn their offer on 14-11-1969. Most of the other firms who have given higher offers have not confirmed validity of their offers even upto 30-11-1969."

"We have still not been able to settle the question of allocation of steel against our E.Cs. In this connection, DG has lastly written to the Secretary, Iron and Steel Ministry vide his d.o. dated 20-11-1969 requesting for an early decision in the matter of allocation of steel against DGS & D demands. In this d.o. D.G. has also highlighted the point that any delay in decision regarding allocation of steel against DGS & D demands may lead to withdrawal of offers/ payment of higher prices. It appears that this matter is not likely to be settled in the immediate future and it is likely to take some more time."

In the circumstances explained above, we have no other go except to allow the tenders to lapse in this case and call for fresh tenders as and when the question of allocation of steel is finally settled."

2.11. The Committee desired to know the reasons for the cut in the quota of billets allocated to DGS & D by the Ministry of

Steel. A representative of the Department of Steel explained: "Upto 1967 we were having annual billet allocation policies because billets continued to be scarce right upto that period and there various allocations for different parties including the DGS & D for meeting the Railway requirements. In May, 1967, we formally withdrew all distribution and price control for steel including billets because during the period of recession the demand had slackened to such an extent that the availability from the plants, was surplus to the orders that they were receiving within the country. We, therefore, left it free to all parties to order their steel direct from the plants. Therefore, billet allocation policy lapsed in 1967 and was not renewed for a period of two years. It was only in August, 1969, when due to resurgence of demand after the recession we found it necessary to introduce again a formal billet allocation policy. In August, 1969, while we laid down certain broad distribution, no specific quantity was kept for the DGS & D, because for two years they had been getting materials of their own and it was presumed that they could still continue to get materials. As was mentioned. . . . billets are not the only raw materials for getting these supplies. They could get them made from other raw materials as well."

2.12. Asked whether the DGS & D were consulted before the revised distribution policy was issued, the representative of the Department of Steel stated: "When we announced the policy, we did not consult them. They represented and we reconsidered the question immediately in 1969 itself."

2.13. As to why the DGS & D was not consulted in 1969 when the new distribution policy for billets was announced, the Secretary, Department of Steel stated during evidence: "I would like to say that when a policy of reintroducing control is introduced, we should look at what existed before. We are not trying to say that we did not make a mistake in this. The very fact that on representation we changed the policy shows that a mistake was made." He added: ". . . .if a control is reintroduced two years later then, at the time of reintroducing the control we should ordinarily look at what existed earlier. We should have seen to it that the DGS & D was not left out. I would also like to make the suggestion that while the DGS & D is an indirect user—he is not one of the direct users—they had certainly made a mistake in leaving him out. But when this Department made a representation the Department of

Steel was quite receptive and changed the policy within three months."

2.14. Subsequently in a note furnished at the instance of the Committee, the Department of Steel stated:

"Prior to 1969 there was no shortage of billets and the producers were having shortage of orders for billets. When shortages were first felt, a comprehensive distribution policy was first announced vide Ministry of Steel's letter dated 5-7-1969 (.....) At that time many re-rollers were carrying heavy export orders and a substantial proportion of the availability was allocated to them for fulfilling the export orders.

The special allocations were bringing some distortion in the distribution of scarce billets inasmuch as those re-rollers who get allocations out of the special quotas fared much better than those not so lucky. It was, therefore, urged by the SRMA that these special allocations should be considerably reduced. Further, so far as DGS & D requirements of billets for track fittings of Railways were concerned, these could as well be manufactured from material other than billets, though in that case it might be somewhat costlier. It was, therefore, felt that there was no need for a special billet quota for DGS & D.

However, when the question was taken up by the Department of Supply, the matter was re-examined. In effect, though the track fittings could be made out of material other than billets, what Railways (and Department of Supply) were really seeking was protection against high market prices. Since Railways were at the same time selling their used rails. (which could be used as re-rollable material) at market prices, it was decided that the special quota of DGS & D might be restored to some extent on the condition that an appropriate quantum of used rails would be made available by Railways at reasonable price.

Considering the urgency of the matter and pending a final decision on the question of scrap rails to be released by the Railways, DGS & D were allocated 3,000 tonnes of billets per month for executing the contract placed on them. In this connection it may be mentioned that used rails could not be released by the Railways during the period 1969-70 and 1970-71 although billets were allocated to the DGS & D. This was due to a court injunction preventing Railways from selling used rails."

2.15. In reply to a question as to how the Railways' works were affected because of the decision to allow the tenders for dog spikes opened on 30-5-1969 to lapse due to cut in the DGS & D quota of billets, a representative of the Railway Board stated during evidence: "The proposed works which were to be done with the material could not proceed. Therefore, we moved in the matter and that is why there were meetings at high levels—at the Cabinet Secretary level and later on we got some quota and that is why they again called tenders in January, 1970."

2.16. In a written note the Railway Board have also stated: "It may be indicated that the requirements of dog spikes were placed on DGS & D in a consolidated form and since there was a general shortage of track fittings including dog spikes in the years 1969-70 and 1970-71, it is not possible to assess any demonstrable loss due to non-supply of dog spikes. It may, however, be mentioned that non-supply of track fittings resulted in the deferment of certain track renewals and construction works on the Railways."

2.17. The details of the various stages in chronological order of the opening of tenders for Dog Spikes for the Railways' 1969-70 requirements, lapsing of the tenders and correspondence with the Ministry of Steel about restoration of the quota for billets following the revised policy issued in July, 1969 are given in Appendix IV.

It is seen therefrom that tenders for 1969-70 requirements of dog spikes were opened on 30-5-1969. These tenders were allowed to lapse on 5-12-1969, as the attempts for the restoration of the cut in steel quota had not succeeded. Fresh tenders for concluding running contracts against Railways 1969-70 and 1970-71 demands were opened on 5-2-1970. There was protracted correspondence between DGS&D and the Ministry of Steel about the issue of essentiality certificates to the two successful tenderers as also for the allocation of adequate quota of billets for supply to the fabricators. As the firms declined to keep their tenders open till the matter had been thrashed out with the Ministry of Steel, these tenders also were allowed to lapse. Again fresh tenders were invited and opened on 11-8-1970. These were subsequently accepted on 11-1-1971.

2.18. The table below gives details of the rates tendered by the two firms from whom the dog spikes were ultimately purchased

in different tenders opened on 30-5-1969, 5-2-1970 and 11-8-1970:

Item No. of Stores	Firm 'A'			Firm 'B'		
	Rates offered against tenders opened on			Rates offered against tenders opened on		
	30-5-69	5-2-1970	11-8-70	30-5-69	5-2-70	11-8-70
	(Rates per 50 Kg.)			(Rates per 50 Kg.)		
	Rs.	Rs.		Rs.	Rs.	
1	60.00	79.50	88.15	68.85	73.73	78.85
2	60.00	80.25	88.85	67.85	73.73	78.85
3	60.00	81.90	89.90	66.85	76.73	79.85
4	60.00	81.50	90.50	70.85	78.73	79.85

From the above it is seen that against a rate of Rs. 60/- quoted by Firm 'A' in May, 1969, the rates quoted by the same firm in August, 1970, ranged between Rs. 88.15 to Rs. 90.50. Similarly in the case of the Firm 'B' the rates quoted by them in the tenders of 11-8-1970 were much more than those quoted in May, 1969. 1

2.19. Referring to the Audit Paragraph, the Committee desired to know the policy followed by the Department of Steel in regard to distribution of billets to re-rollers. A representative of the Department of Steel explained during evidence: "At that time the policy was that normally billets were given only to those re-rollers who were recognised by the Ministry as billet re-rollers. This was the general policy, but certain special exemptions were made for specific purposes. One of these exemptions was for the quota of billets that we allotted to the DGS&D. It was really to enable the DGS&D to get the best possible quotations from all re-rollers, whether they were registered or non-registered."

2.20. The Secretary, Department of Steel further informed the Committee that "The policy was declared towards the end of April, on the 27th April, 1970, in which we made it clear that the quota which is allotted to DGS&D can be given to any re-roller, whether registered or unregistered, on his recommendations. On the 17th April, the Iron & Steel Controller advised the Department of Supply about such an allocation. In the meantime, the Department of Steel had announced the policy on the 27th April, according to which the allocations could be made to both registered and unregistered re-rollers within the quota of the DGS&D."

2.21. The Committee enquired what was the basis for the assumption by DGS&D that it was not possible to release billets to an unregistered re-roller. To this a representative of the Ministry of Supply replied:

“The point that billets were not to be released to the suppliers who were not registered with the Iron & Steel Controller stems from a decision which was conveyed to us by the Iron & Steel Controller in his letter dated 6th December, 1965. It was stated therein that the supply of billets against DGS&D contracts to unregistered re-rollers should be discontinued. In a subsequent letter, after our Calcutta office had a discussion with the JPC in March, 1967 we were informed that the billets were not to be released to a firm who were not registered with the Iron & Steel Controller as a re-roller.”

2.22. The witness further clarified: “When quotations were received from certain suppliers who were not registered with the Iron & Steel Controller, on our representation, the Calcutta office discussed the matter with JPC and in his letter dated 30th March, 1967, he had stated that he had discussed this matter with JPC and found that the existing procedure was still being followed. In other words, billets were not to be released to a firm which was not registered with the Iron & Steel Controller as a re-roller. On the basis of this letter instructions were naturally issued in the DGS&D organisation by an Office Order...The Office Order is dated 15th June, 1967 saying that this procedure which had been followed since 1965 should continue to be followed. In a subsequent letter dated 27-4-1970, which was issued by the Ministry of Steel and Heavy Engineering in pursuance of the discussions at a meeting held in the room of Secretary, Ministry of Steel, it was implied, of course not in specific terms, that the same procedure would be followed, that is, the billets were not to be released against E|CS to fabricators who were not registered with the Iron & Steel Controller. Para 8 of that letter reads as follows:

“No adjustment will be made in regard to the allocations made from the reserved quota and the DGS&D quota. However, JPC should ensure that in no case does the sum total of the billets received by any individual re-roller from all quotas exceed his two shift assessed monthly capacity.”

Earlier, the DGS&D's quota had actually been stopped by the Department of Iron and Steel. When we took up the matter at the highest level, our quota was restored in the month of December, 1969. In the letter dated 27.12.69 it was stated *inter-alia* that 'You may kindly advise the JPC that the supply of these billets will be in addition to the normal domestic quota of the billet re-rollers'. Again, the word used is 'billet re-rollers'. So, unless we received any communication from the Department of Iron & Steel, or the Iron & Steel Controller, the DGS&D had to go by the same instructions which date back to 1965. We ourselves could not issue any essentiality certificate to a supplier who was not registered as a re-roller with the Iron & Steel controller.

2.23. A copy of the letter dated 27-4-1970 issued by the Ministry of Steel and Heavy Engineering is reproduced at Appendix V.

2.24. Asked whether, in the tenders for the dog spikes floated on the 12th January, 1970, it had been specified that only registered re-rollers would be allowed to submit quotations, the representative of the Ministry of Supply stated that no such stipulation had been made in the tenders.

2.25. The Audit paragraph states that as the two firms, from whom offers were received in response to the tender enquiry issued on 12th January, 1970, were not registered with the Iron & Steel Controller, Calcutta, the Director General Supplies and Disposals enquired in March, 1970 from the Iron and Steel Controller whether essentiality certificate for billets could be issued to the two firms. At the instance of the Iron & Steel Controller, the DGS&D made a reference to the Ministry of Steel and Heavy Engineering on 1st May, 1970. Despite reminders issued by DGS&D on the 13th May, 1970, 23rd June, 1970 and 28th July, 1970, the Ministry of Steel & Heavy Engineering sent their reply only in September, 1970 by which time the offers made by the two firms had expired. Explaining the reasons for delay in sending a reply to the reference by the DGS&D, the Secretary, Department of Steel deposed during evidence: "Here I may say that the letter of the 1st of May of the DGS&D was not received by the Department at all. It appears from the register that the reminder which was issued by the DGS&D was received by the Ministry, but it is not in the file. The only letter available in our records is the DO letter dated 24th June 1970."

"It is true that in giving an answer to this letter, the Department took three months and it has been stated both on this file and even se-

parately that this was because of heavy pressure of work in this particular section at that time. This was the period immediately after the recession and there was considerable spurt in industrial activity. The demand for steel increased considerably while the production of steel was not keeping pace. The number of representations and letters regarding steel allocation increased and the steel control section was flooded with these. Between May and August 1970, the section was receiving on an average 800 to 1000 letters per month and there were only three clerks to deal with them. There was a consistent complaint of over-work. It was pointed out by the office that there were a number of receipts which were not receiving attention because of this pressure of work and accordingly, a study was made by the Staff Inspection Unit and the following additional posts were sanctioned to deal with the work a few months later—1 Section Officer, 2—Assistants and 1 LDC. I should however mention that in the reminder which the DGS&D had sent to the Department, if it had mentioned that it was against a tender wherein the date was expiring on the 5th August, I feel that perhaps it would have received much higher attention than the reminders that they did receive.”

2.26. The Committee enquired whether the letter dated 1st May, 1970 issued by DGS&D had now been located in the Ministry of Steel & Heavy Engineering. In this connection the Secretary, Department of Steel stated: “There is no trace of it in the Ministry, that is, it was not received in the receipt section. But I admit that the reminder which came on 13th May was received, but never reached the file. The only thing on the file is the letter dated 24 June, 1970. It is the only one on the file. I explained a little earlier in answer to a question that this coincided with the time when recession was over and there was a spurt of applications, representations etc. and the Ministry in this section was receiving something like 800-1000 receipts a month. They were complaining—there is record of that—that the work was so heavy that they just could not deal with it and additional staff should be obtained. Then the staff inspection unit looked into it. In fact, against 3 hands in that section, they sanctioned an additional section officer, 2 assistants and one LDC. The unfortunate thing is that even after that the 24th June letter remained unreplyed for about 3 months. The reply was finally sent on 28 September. The only extenuating circumstance is that none of the reminders mentioned that the last date for the tender was 5th August. If they had done that, I think possibly it would have received better attention than it did. But there is no doubt there was delay in sending a reply.”

2.27. During evidence the Committee pointed out that when the two firms had been asked by the DGS&D to extend the expiry date of their offers to 5th August, 1970, efforts could have been made to get the necessary clarification from the Ministry of Steel. To a question whether besides writing letters any effort was made to get the clarification from the Ministry of Steel, a representative of the Ministry of Supply stated: "There is nothing on record to show that some body went across... there is no record to show whether any effort to that effect was made."

2.28. The DGS&D has been procuring certain items of track fittings such as dog spikes for the Railways. Prior to 1967, the steel billets were supplied to the manufacturers of track fittings by the DGS&D out of the allocation made by the Ministry of Steel for the purpose. In August, 1969, when the control was reimposed, the Ministry of Steel announced a new billet distribution policy. In fixing the quota for various consumers the DGS&D's requirement was overlooked. Later on, following representations from the DGS&D and discussions at Secretaries' level the steel allocation for the DGS&D was partially restored to 3,000 tonnes per month as against 7,000 tonnes allowed earlier. In the meantime, the DGS&D was forced to allow the tenders for the procurement of 2241 tonnes of dog spikes opened on 30th May, 1969 against 1969-70 requirement of Railways to lapse in December, 1969. In view of the resultant extra expenditure and the deferment of track renewal and construction work on the Railways, the Committee take a serious view of the omission to include the substantial requirement of the DGS&D in the revised policy of distribution of billets. They desire that responsibility should be fixed for the lapse.

2.29. Another lapse on the part of the Ministry of Steel was that the DGS&D was left in doubt as to whether he could issue the essentiality certificates for steel billett to the fabricators of track fittings who were not registered as re-rollers. Their letter dated 27th April, 1970 was not clear on this point. It is unfortunate that the fresh tenders for the procurement of dog spikes opened on 5th February, 1970 had to be cancelled in August, 1970, as the clarification sought for by the DGS&D regarding the issue of essentiality certificates was not received from the Ministry of Steel in time. Consequently fresh tenders had to be invited when the rates went up further. The Committee, therefore, suggest that the carelessness in drafting the letter dated 27th April, 1970 should be gone into.

2.30. The Audit paragraph highlights several procedural lapses which cost the exchequer an extra expenditure of Rs. 2.69 lakhs. It is unfortunate that the reference made by the Ministry of Supply on 1st May, 1970 to the Ministry of Steel remains untraced. According to the representative of the Ministry of Steel the reference was not at all received and although the reminder dated 13th May, 1970 (with which a copy of the original letter was enclosed) was received in the Ministry, it was not to be found on the relevant file. The Committee desire that DGS&D should find out from their records whether the reference dated 1st May, 1970 was actually delivered in the Ministry of Steel and if not responsibility may be fixed for its non-delivery. In case any proof of its delivery in Department of Steel is available it should be furnished to Department of Steel who may take action for fixing responsibility. At the same time the Department of Steel should find out how the reminder dated 13th May, 1970 although received in the Department remains untraced. The Committee would like that the action taken by the DGS&D and the Department of Steel in pursuance of the above observations be intimated to them within 3 months.

2.31. Secondly the Department of Steel which received the letter dated 24th June, 1970, sent a reply only in September, 1970 i.e. after about 3 months. That this delay was due to dearth of staff to meet the unexpected rush of work in the concerned section of the Department of Steel does not sound very convincing. The Committee feel that in view of the heavy rush of work proper priorities should have been laid down so that urgent items were not lost sight of. At this stage the Committee can only emphasise that such a negligence should not be allowed to be displayed in future.

2.32. The Committee further find that DGS&D has handled the matter in a routine fashion. Keeping in view the period of validity of tenders the Directorate General of Supplies and Disposals ought to have made special efforts to get the necessary clarification from the Ministry of Steel in time. The attention of the Ministry of Steel should have been drawn to the date of expiry of the offers at the appropriate level. The Committee hope that all concerned will take a lesson from the lapse that occurred in this case.

NEW DELHI;
 March 21, 1973.
 Phalguna 30, 1894 (Saka).

ERA SEZHIYAN,
 Chairman,
 Public Accounts Committee.

APPENDIX I

(See para I.2)

Statement of premia and royalty received and receivable upto 31-3-72 in respect of processes developed at CAMERI, Durgapur.

S. No.	Name of process	Name of Licensee	Premium	Royalty upto	Production Value	Remarks		
1	2	3	4	5	6	7		
		Ra.	Ra.	Ra.	Ra.			
1	Horizontal Double Twisting Machine.	M/s Kumardhubi Engg. Works, Calcutta.	20,000	..	..	Not in production
2	Vertical Paper Wrapping Machine for covering round wires.	Do.	20,000	5,120.00	2,01,001.00	No return after 31-3-70.		
3	Ice Flake Machine	M/s Kirtoskar Pneumatic Company, Poona.	20,000	10,999.39	1,74,601.00	Production value for the period 30-9-69 not availed.		
4	General Purpose Twisting Machine Loop Cables.	M/s. Promain Ltd., New Delhi.	20,000	<div style="display: flex; align-items: center;"> <div style="font-size: 3em; margin-right: 10px;">}</div> <div> <p>No return received after 31st December, 1971.</p> <p>The firm has not made any royalty payments.</p> </div> </div>				
5	Continuous Resistance Annealers	Do.	5,000				19,886.00	9,94,300.00
6	Spoolers (1000 lbs.)	Do.	8,000					
7	Infinitely Variable Speed Gear Box	Do.	8,000			Not in production.		
8	Fine Wire Drawing Machine	Do.	20,000			Not in production.		

		Rs.	Rs.	Rs.	
9	Extruder Line 2½"	10,000	..	..	Rs. 5000 yet to be received.
10	Flexible Couplings	500	268.09	13,404.25	
		1,31,500	36,273.48	13,83,306.25	
11	Dye Penetrants (Pioneer Equipment)	..	..	..	Not in production.
12	Orbital Motion	1,000	..	..	Not in production.
13	Tube Pump	1,000	..	..	Not in production.
14	Metering Pump.	1,000	..	..	Not in production.
15	Steam Brake	2,500	..	..	Not in production.
16	Road Making Machinery (Bitumen Tar Distributors)	1,000	..	..	Not in production.
17	Gritters	5,000	..	..	Not in production.
18	Rotillers	5,000	..	..	Not in production.
19	Fluorescent Dye Penetrants for surface and sub-surface crack Detector.	5,000	..	..	Not in production.
20	Fluorescent Penetrant	1,500	..	..	Not in production.
21	Transistorised Ignition System	2,500	..	..	Licence to be determined as the firm is not interested.

1	2	3	4	5	6	7
22	Electromagnetic and Eddy Current Chutches.	M/s. G. R. Industries, Calcutta.	3,000	..	..	Not in production.
23	Eddy Current Couplings	M/s. G.R. Industries Calcutta.	5,000.00	..	..	Not in production.
24	High Speed Twisting Machine	M/s Kumardhubi Engg., Calcutta.	20,000.00	4,828.00	2,41,400.00	After 31st March, 1970 no return received.
25	Paper-cum-Cotton Thread Insulating Machine.	Do.	20,000.00	..	..
26	49 CC Internal Combustion Engine.	M/s. Sen and Pandit (P) Ltd., Calcutta.	25,000.00	..	..	Not in production. Rs. 10,000 yet to be received.
27	High Pressure Hydraulic Pump	M/s Vinkum Engg. Co., Enterprises (P) Ltd., Jaipur.	5,000.00	..	..	Not in production.
28	Single lever Automatic Depth cum draft control Hydraulic System.	Do.	1,000.00	..	..	Not in production.
29	Hydraulic Dynamometer	M/s Bhartia Electric Steel Co. Ltd., Calcutta.	5,000.00	..	..	In production.
30	Filters	M/s. Fritz and Singh Pvt. Ltd., Calcutta.	..	65,259.42	43,50,628.00	
31	Tractor Drawn Implements	M/s. Marshall Sons & Co., (India) Ltd., Calcutta.	..	..	..	Not in production. Licence effective 1-2-72.
32	Rolled Austenitic Monyanese Steel Points & Crossings.	M/s. Hindustan Development Corpn. Ltd., Calcutta.	5,000.00	..	..	Not in production. Rs. 2,500 - yet to be received. The Firm has expressed that as the know-how is not fully developed, the firm wants the refund of the premium.
33	20 H.P. Tractor	M/s. Punjab State Industrial Development Corpn. Chandigarh.	..	1,00,000.00	..	Received advance royalty.
			2,46,000.00	2,06,360.90	59,75,334.25	

APPENDIX II

(See para 1.4)

Processes initiated and developed by CMERI and released to industry on payment of ad-hoc fee as technical aid to industry with the approval of DGSIR.

Name of the process	Name of the Party	Amount Received	Remarks
1. Calorising by Cementation Process.	M/s. Aluminising Co., Calcutta.	1,000	..
2. Jointing technique Aluminium to Aluminium and Aluminium to copper-by soldering process.	1. M/s. Shriram Refrigeration Industries Ltd., Hyderabad.	10,000	..
	2. M/s. Sur Industries (P) Ltd., Calcutta.	5,000	..
	3. M/s. Voltas Ltd, Thana, Maharashtra.	10,000	..
	4. Universal Radiator (P) Ltd., Coimbatore	20,000	Yet to be released.
(ii) Ad-hoc designs for quality control test rigs, instruments etc. undertaken on Specific requests & released to the parties.			
1. Wind Tunnel	1. M/s. Gasket Oil-seals Pvt. Ltd. Baroda.	2,000	..
	2. M/s. Standard Radiators Pvt. Ltd., Baroda.	2,000	..
2. Test Rigs for filter Testing.	1. M/s. Fritz & Singh Pvt. Ltd., New Delhi.	1,660	..
	2. M/s. Elofic Industries Faridabad.	530	..
	3. M/s. India Filters Mfgr. (P) Ltd, Tamil Ndu.	820	..
3. Thermal Conductivity Apparatus.	M/s. Fertiliser Corpn. of India Ltd., Sindri.	800	.. No copy
(iii) Sponsored work undertaken on behalf of industry and released know-how to the concerned parties :			
1. Re-design of Thresher.	M/s. Damodar Enterprises Ltd. Raniganj.	2,000	..
2. Schematic drawing for scrap transfer car.	M/s. Mc Nally Bird Engg. Co. Ltd., Dhanbad.	1,000	..

Name of the process	Name of the party	Amount Received.	Remarks.
3. Design of hooking arrangement of car hauls.	Do.	4,100	..
4. Design of arial flow fan for mining ventilation.	M/s. Voltas Ltd., Calcutta.	3,500	..
5. Design of various sizes of sump (swerage) mixed flow and self priming pumps.	IMC-Vogel Industries, Ltd., Calcutta.	11,100	..
6. Checking and Comments on the strength calcula - tion of the modified design of the drum mill ends.	M/s. Bharat Heavy Electricals Tiruchirapally.	1,000	..
7. Design of break spinning machine.	The Textile & Allied Industries Research Organisation (TAIRO), Baroda.	6,200	The work was to be completed in four phases & the fee was to be paid by the party in four instalments — first Rs. 3200/- & next Rs. 3000/- each. After completion of second phase the party did not went to proceed further.
8. Redesigning of rotary cutter "Jungle Jim."	Steelsworth (P) Ltd., Tinsukia	6,000	The party is to pay Rs- 9000/- in 3 (three) instalments. Drawings sent to the party who made the prototype which has already been tested. The design is being modified. The party will pay balance 3000/- at the time of delivery of the final drawings.
9. 3-Dimensional Photo-elastic stress analysis of wheel centres.	R. D. S. O. Lucknow.	6,000	..
10. Design of Automatic Belt weighing machine (both mechanical & electrtonic).	Associated Cement Co. (P) Ltd., Bombay.	25,000	75,000 - to be paid by the party in three instalments. Drawing sent to the party for making prototype. Second instalment will be paid now and the third instalment as soon as the first commercial machine is reproduced by the party.

Name of the process	Name of the party	Amount Received	Remarks.
11. Study on the erosion of induced draft fan in pulverised coal fired thermal power plant.	D.V.C. Maithon.	..	Report submitted. Fee Rs. 5000 - is to be received.
12. Machin ability of free cutting steel.	Guest keen Williams Ltd., Howrah.	10,000	..
13. Improving performance of hand operated tube well pump.	All India Institute of Hygiene and Public Health Calcutta.	3,713	..
14. Commissioning of incinerator plant at Goragacha.	Corporation of Calcutta, Calcutta.	..	Fee Rs. 10,000/- not yet received. Preliminary report sent. Final report will be sent after receiving the fee.
15. Design of Watch components.	Empire Watch Co. , Calcutta.	3,905 -	Total fee to be paid by party Rs. 10,000 -. Balance fee will be paid in instalments with the progress of work. Drawings for some components have been supplied.
16. Design of engine & gearbox of a 10 p.h. power-filler.	Garden Reach Workshop Ltd, Calcutta.		The firm is to pay Rs. 50,000 - at the time of delivery of drawings for prototype and Rs. 30,000 - on the clearance of the first prototype and pay royalty @ Rs. 70 - for each unit for 5 years from the date of first commercial despatch. Drawings for prototype delivered. First instalment is awaited.
17. Design & development of portable conveyor.	Indian P & T Deptt. New Delhi.	..	P & T have agreed to bear estimated expenditure of Rs. 34,000 - The work is in progress.
18. Design of deepwell tubebine pump.	Garden Reach Workshop Ltd. Calcutta.	9,000/-	Work is on progress.

In addition to above, design of economical structure developed by Institute, are being taken up from time to time on specific requests from various parties. The Institute has so far received about Rs. 1.10 lakhs as fee from number of parties for the supply of the drawings for the structure.

APPENDIX III

(See para 1'53)

Details of the Processes released to the Industry

Serial No.	Process	Terms and conditions	Name of the licensee
1	2	3	4
1	Horizontal double twisting bunching machine	<ul style="list-style-type: none"> • Lumpsum Premium • Recurring Royalty • Nature of Licence • Period of Licence 	<ul style="list-style-type: none"> • Rs. 20,000/- • 2% on sales • Exclusive • 10 Years. <p>M/s. Kumar Dhubi Engg. Works. Calcutta.</p>
2	Vertical paper wrapping machine for covering round wires	<ul style="list-style-type: none"> • Lumpsum Premium • Recurring Royalty • Nature of Licence • Period of Licence 	Do.
3	High speed twisting machine	<ul style="list-style-type: none"> • Lumpsum Premium • Recurring Royalty • Nature of Licence • Period of Licence 	Do.
4	Paper-cum-cotton thread insulating machine	<ul style="list-style-type: none"> • Lumpsum Premium • Recurring Royalty • Nature of Licence • Period of Licence 	Do.
5	Ice Flaking machine	<ul style="list-style-type: none"> • Lumpsum Premium • Recurring Royalty • Nature of Licence • Period of Licence 	<ul style="list-style-type: none"> • Rs. 20,000/- • 2% on sales • excluding bought out items • Exclusive • 10 Years. <p>M/s. Kirloskar Pneumatic, Poona.</p>

6	General purpose twisting machine for loop cable	<ul style="list-style-type: none"> • Lumpsum Premium • Recurring Royalty • Nature of Licence • Period of Licence 	<ul style="list-style-type: none"> • Rs. 20,000/- • 2% on sales • Exclusive • 10 Years 	M/s. Promain Ltd., New Delhi.
7	Continuous resistance annealer	<ul style="list-style-type: none"> • Lumpsum Premium • Recurring Royalty • Nature of Licence • Period of Licence 	<ul style="list-style-type: none"> • Rs. 5,000/- • 2% on sales • Exclusive • 10 Years 	Do.
8	Spooler 1000 pounds	<ul style="list-style-type: none"> • Lumpsum Premium • Recurring Royalty • Nature of Licence • Period of Licence 	<ul style="list-style-type: none"> • Rs. 8,000/- • 2% on sales • Exclusive • 10 Years 	Do.
9	Infinitely variable speed gear box	<ul style="list-style-type: none"> • Lumpsum Premium • Recurring Royalty • Nature of Licence • Period of Licence 	<ul style="list-style-type: none"> • Rs. 8,000/- • 2% on sales • Exclusive • 10 Years 	Do.
10	Extruder line	<ul style="list-style-type: none"> • Lumpsum Premium 	<ul style="list-style-type: none"> • Rs. 10,000 • (5,000/- at the time of handing over the drawing. Balance after the completion of the prototype). 	M/s. Brimco Plastic Machinery Corporation, Bombay.
11	Wire drawing machine	<ul style="list-style-type: none"> • Recurring Royalty • Nature of Licence • Period of Licence • Lump sum Premium • Recurring Royalty • Nature of Licence • Period of Licence 	<ul style="list-style-type: none"> • 2% • Exclusive • 10 Years • Rs. 20,000/- • 2% on sales • Exclusive • 10 Years 	M/s. Promain Ltd., New Delhi
12.	Flxible coupling	<ul style="list-style-type: none"> • Lump sum Premium • Recurring Royalty • Nature of Licence • Period of Licence 	<ul style="list-style-type: none"> • Rs. 500/- • 2% on sales • Non-exclusive • 10 Years 	M/s. Neofabrics, Calcutta.

13. Dye Penetrants	.	.	.	.	.	Lump sum Premium Recurring Royalty Nature of Licence Period of Licence	Nil 2% on sales Exclusive 10 Years	M/s. Pioneer Equipment Co. Pvt. Ltd., Baroda.
14. Orbital motion	.	.	.	.	.	Lump sum Premium Recurring Royalty Nature of Licence Period of Licence	Rs. 1000/- 2% on sales Exclusive 10 Years	M/s. Khemji Sons, Bombay.
15. Tube pump	.	.	.	.	.	Lump sum Premium Recurring Royalty Nature of Licence Period of Licence	Rs. 1,000/- 2% on sales Exclusive 10 Years	—do—
16. Metering pump	.	.	.	.	.	Lump sum Premium Recurring Royalty Nature of Licence Period of Licence	Rs. 1,000/- 2% on sales Exclusive 10 Years	—do—
17. Steam brake	.	.	.	.	.	Lump sum Premium Recurring Royalty Nature of Licence Period of Licence	Rs. 2,500/- 3% on sales Exclusive 10 Years	M/s. Damodar Enterprises Ltd., Calcutta.
18. Bitumin tar distributor	.	.	.	.	.	Lump sum Premium Recurring Royalty Nature of Licence Period of Licence	Rs. 1,000/- 1% on sales Exclusive 10 Years	M/s. Khandelwal Udyog Ltd., Bombay.
19. Gritors	.	.	.	.	.	Lump sum Premium Recurring Royalty Nature of Licence Period of Licence	Rs. 5,000/- 2% on sales Exclusive 10 Years	—do—

20.	Rotillers	.	.	.	.	.	.	.	Rs. 5,000/- 2% on sale Exclusive 10 Years	M/s. Khandelwal Udyog Ltd. Bombay.
21.	Flourescent dye permanent for surface crack detector.	.	.	.	.	.	.	.	Rs. 5,000/- 2% on sales Exclusive 10 Years	M/s. Pioneer Equipment Co., Ltd., Baroda.
22.	Flourescent Penetrants	.	.	.	.	.	.	.	Rs. 1,500/- 2% on sales Exclusive 10 Years	Do.
23.	Transistorised ignition system	.	.	.	.	.	.	.	Rs. 2,500/- 3% on annual sales upto 5,000 units. 2% on annual sales of 5,000 and above. Exclusive 10 Years	M/s. Magnento Electric Control Pvt. Ltd., Calcutta.
24.	Electromagnetic and eddy current clutches	.	.	.	.	.	.	.	Rs. 3,000/- for the first design and Rs. 1,500 for the subsequent design 2% on sales Exclusive 10 Years	M/s. G. R. Industries, Calcutta.
25.	Eddy current coupling	.	.	.	.	.	.	.	Rs. 5,000/- for the First design and Rs. 2,500/- for the subsequent design.	Do.

26. High pressure hydraulic pump	Recurring Royalty : 2% on sales Nature of Licence : Exclusive Period of Licence : 10 Years	Lump sum Premium : Rs. 5,000/- Recurring Royalty : 2% on sales Nature of Licence : Exclusive Period of Licence : 10 Years	M/s. Vinkum Engg. Co., Jaipur.
27. Single lever automatic depth cum draft control hydraulic system	Lump sum Premium : Rs. 1,000/- Recurring Royalty : Rs. 20/- for each set manu- factured Nature of Licence : Non-exclusive Period of Licence : 10 Years	Rs. 1,000/- Rs. 20/- for each set manu- factured Non-exclusive 10 Years	—do—
28. 49 CC internal combustion engine.	Lump sum Premium	Rs. 25,000/- (15,000 payable before the execution of these presents and balance is to be paid at the time of delivery of drawings)	M/s. Sen and Pandit Pvt. Ltd. Calcutta.
	Recurring Royalty	Upto 20,000 engines Rs. 5/- per engine between 20,000—40,000 Rs. 2-5/-	

1	2	3	4
36	Inverted Block Wire Drawing Machine	<ul style="list-style-type: none"> Nature of licence Period of licence Lump sum Premium Recurring Royalty Nature of licence Period of licence 	<ul style="list-style-type: none"> Exclusive for Punjab for 7 years and then... non-exclusive. 10 years 2,000/- 2% on sales Exclusive 10 Years M/s. Kumardhabi Engg. Works, Calcutta.

APPENDIX IV

(See para 2.17)

Details of the various stages in chronological order of the opening and lapsing of the tenders

Date	Events
1-3-69	Planning of indents received for 1969-70.
14-4-69	Tender notice issued.
30-5-69	Advertised tenders opened.
20-6-69	Request sent to Director of Inspection for capacity reports on unregistered firms.
2-8-69	Unregistered firms asked to furnish Income Tax Clearance Certificates, bankers name and addresses.
22-8-69	Proposals of Section Officer on the tenders opened on 30-5-69.
29-8-69	Decision taken to ask firms to accept Essentiality Certificate or replenishment basis in view of the Office Orders No. 67 adted 13-8-69.
30-8-69	Tenderers requested to keep their offers open for one month.
11-9-69	Reference to tenderers reg: unacceptable conditions.
24-9-69	Reminders to the above, and references to Bankers.
29-9-69	Reminders to the above, and references to Bankers.
22-10-69	D.O. letter from Secretary (Supply) to Secretary (Steel) requesting for restoration of allocation of 7,000 Mts. Billets per month to DGS&D and for special allocation of substantial quantity to meet immediate requirements.
22-10-69	Case referred to Director (P & S) in the DGS&D to ascertain position in respect of Essentiality Certificate.
24-10-69	Note of Director (P & S) indicating the action taken by the Ministry of Supply with the Ministry of Steel. Copy of D.O. dated 22-10-69 from the Secretary Supply to Secretary Steel furnished.
29-10-69	Decision taken to extend offers upto 30-11-69.
31-10-69	Meeting of Secretaries held in Cabinet Secretariat where it was agreed that Department of Steel would furnish to Ministry of Steel the requisite details of obligation for release of billets to fabricators.
1-11-69	D.O. letter from D. G. to Secretary, Steel indicating requirements of billet for allocation to fabricators.
20-11-69	D.O. from D.G. to Secretary (Steel) furnishing three lists indicating names of Suppliers and quantity of MS Billets to be allocated to them.
28-11-69	Proposal submitted to call three firms for discussion and to ask the firms to keep their offers open upto 31-12-69.

Date	Events
29-11-69	Deputy Director General's query as to why fresh tender enquiry should not be issued.
29-11-69	File referred to Director (P & S) to ascertain the position of supply of steel
1-12-69	Director (P & S) note stating that the Railway concerned will be advised when reply is received from Steel Ministry.
5-12-69	Decision to allow the tenders to lapse.
22-12-69	D.O. from Secretary (Supply) to Secretary (Steel) pressing for immediate allocation of at least 3,500 Mts. of billets per month.
31-12-69	Decision to issue limited tender enquiry.
12-1-70	Tenders to open on 5-2-70.
12-1-70	Limited Tender Enquiry was issued to 4 items of Dog Spikes to conclude Running Contracts against Railways 1969-70 and 1970-71 demands.
13-1-70	Meeting of Secretaries held in Cabinet Secretariat where decision was taken to make an allocation of 6,000 M.T. billets to DGS&D.
21-1-70	D.O. from Secretary (Supply) to Secretary (Steel) furnishing details of steel requirements during 1970 together with DGS&D's Forecast of requirement of various categories of steel required for allocations to the Fabricators during 1970-71.
5-2-70	Tenders were opened. A regular and 1 late tenders were received. M/s Ramchander Heralall (Registered Firm) & M/s Associated Engg. Co. Jullunder (Registered) for other item but unregistered for dog spikes whose capacity was approved for and order for 610 MT of Dog Spikes had quoted competitive rates for dog spikes on the basis of that Essentiality Certificates for MS billets would be issued to them. Both of these firms are re-rollers but not registered with the I&SC as re-rollers.
18-4-70	Meeting of Sub-committee of Secretaries held in Cabinet Sectt. where it was decided that a further attempt will be made to assess the steel requirement of each Deptt. to determine how much requirement will be met by imported source and how much from indigenous sources.
18-4-70	D.O. from Secretary (Supply) to Secretary (Steel) requesting him to confirm whether DGS&D's requirements will be met from indigenous sources.
1-5-70	Since Essentiality Certificate for billets could be issued to regd. re-rollers only, matter was taken up with the I&SC and the Ministry of Steel requesting them to authorise DGS&D to issue ECS for billets in favour of DGS&D fabricators, who are not regd. with the I&SC as re-rollers for manufacturers of track materials against DGS&D contracts.
13-5-70	The Ministry of Steel were expedited for reply to letter of 1-5-70. As no
23-6-70	reply was received from the Ministry of Steel, the tenders of Ramchander
28-7-70	Heerralall & Associated Engg. Co. could not be decided.

Date	Events
23-5-70	D.O. from DS (Supply) to Development Officer, Ministry of Steel furnishing a note indicating the requirements of various sections of steel against DGS&D's contracts.
7-7-70	The above 2 firms had kept their offers open upto 5-8-70.
11-7-70	The firms were asked to keep their offers open upto 5-9-70.
13-8-70	M/s. Ramchander Heeralal regretted to keep their tender open upto 5-9-70. M/s. Associated Engg. Co. did not reply to letter dated 5-8-70.
28-9-70	The Ministry of Steel confirmed that it was upto the DGS&D to recommend the release of billets to any fabricators whether he was a registered billet re-roller or not. By this time the tenders had lapsed.
2-7-70	The tenders were invited afresh which were opened on 11-8-70. M/s. Ramchander Heeralal and Associated Engg. Co. had again quoted competitive rates which were higher than their quotations of 5-2-70.
27-10-70	D.O. from Secretary (Supply) to Secretary (Steel) pressing for the immediate release of steel required by the fabricators for the supply of crossing sleepers and also informing him of the high prices of Railway Track items being quoted by the Suppliers due to the failure on the part of the Government to provide raw material, due to increase in price of raw material, wages and idle time labour etc. requesting for arrangements for supply of 18,000 M.T. sleeper Bars for supply of Crossing Sleepers for which tenders are pending.
11-1-71	The tenders of above firms were accepted since the Ministry of Steel had authorised DGS&D to issue E.C. for billets to any fabricator whether he was registered as re-roller or not.

APPENDIX V

(See para 2.23)

Letter dated 27-4-70 regarding billet distribution policy for 1970-71

No. SC (I)-12 (1) |70

GOVERNMENT OF INDIA

MINISTRY OF STEEL & HEAVY ENGINEERING

New Delhi, the 27th April, 1970.

To

The Chairman,
Joint Plant Committee,
18, Rabindra Sarani,
Calcutta.

SUBJECT:—Billet distribution policy for 1970-71

Sir,

I am directed to invite a reference to this Ministry's letter No. SC (I)-12(16) |69 dated the 5th July, 1969, on the above subject, and to say that Government have decided that the following distribution procedure may be implemented by the Joint Plant Committee with immediate effect.

The following shall be the broad sectorwise distribution of billets:—

	Metric Tonnes per Mensem
(a) Export quota for rolling bars and rods or export	9,000
(b) Engineering Export Promotion Council	2,500
(c) Railway Workshops	1,500
(d) Twisted deformed bars	5,000
(e) Baling Hoops.	1,000
(f) Other difficult Section	2,500
(g) D. G. S. & D.	4,000
(g) For export as billets against past commitments for supply to neighbouring friendly countries.	5,000
(i) Reserve	3,500

3. The above quotas may be distributed as under:—

(a) *Export Quotas for Export of Bars and Rods:*

The export quota may be distributed to those rerollers who have exported bars and rods, etc., during the calendar year 1968 and 1969. The export quota of each exporter reroller should be fixed on the basis of the best continuous 12 months exports during the above-mentioned two-year period, prorated, to the availability. No quota of billets need be allocated to export houses or their nominees. The exporter rerollers' quota need not also be reduced with reference to the Exports made through Export House'.

(b) *Engineering Export promotion Council Quota*

This quota should be distributed on the basis of the recommendation of the Engineering Export Promotion Council.

(c) *Railway Workshops Quota:*

This quota may be distributed to various Railway Workshops as per the requests received from the Railway authorities.

(d) *Twisted de-formed bars quota:*

The quota may be allocated among re-rollers, who have been licensed for the production of cold twisted de-formed bars or who hold ISI Certification for the same. The basis of distribution will be the recognised or assessed capacity for production of these bars, prorated to availability.

(e) *Baling Hoops Quota:*

This quota may be allocated among baling hoops manufacturers in consultation with the Jute Commissioner and on the basis of capacity and orders on hand prorated to availability.

(i) *Other Difficult Sections:*

This quota may be allocated on the basis of assessed capacity for these sections, as well as acceptable orders in hand prorated to availability. Preference may be given to sections and profiles, considered more difficult, or where there is scopes for greater saving of foreign exchange.

(g) *D. G. S. & D. Quota:*

The quota may be distributed on the basis of recommendatory letters issued by the DGS&D. In lieu of this allocation of 4,000

tonnes, the Railways will place 6,000 tonnes per mensem, of used rails at the disposal of Joint Plant Committee which should be taken into account in making domestic allocations.

(h) Billet exports:

Out of this, 500 tonnes per month will be earmarked for export to Nepal, 250 tonnes for Mauritius, 1,000 tonnes for Iran, and the balance to clear the backlog of other export commitments.

(i) Reserve Quota:

This quota will be utilised to meet priority requirements which Government consider are not adequately met otherwise.

4. The balance available quantity should be distributed as 'domestic quota' prorata in accordance with the capacities as assessed by the Technical Committee or specified in any subsequent Industrial Licence or approval by the Iron and Steel Controller. In calculating the domestic quota, credit for production of electric furnace billets/ingots to the extent of 40 per cent should be taken and the quantity excluded from the total rolling capacity eligible for billet allocation. The expected total availability of billets at present is about 58,000 tonnes per month. If at any time billet availability is found to be in excess of this, the surplus should go to the "domestic quota", to be distributed prorata in the same manner.

5. The exporter rollers would be entitled to domestic quota if their export allocations fall short of a figure equivalent to 1.2 times their theoretical domestic quota, in which case their domestic quota would be equal to the difference between the two. Any exporter roller is, however, entitled to receive upto 50 per cent of his theoretical domestic quota if he agrees to forgo an equivalent quantum of his export allocation.

6. The rollers who receive special allocations for twisted deformed bars, baling hoop and difficult sections would be entitled to domestic quota only if the allocation fall short of a figure equivalent to 4.5 times their theoretical domestic quota in which case their domestic quota would be equal to the difference between the two. Any roller receiving special allocations is, however, entitled to receive upto 50 per cent of his theoretical domestic quota if he agrees to forego an equivalent quantum of his special allocation.

7. Just as in the case of export quota, the rollers will have to satisfy JPC from time to time that the allocation has been used for

the purpose intended, so also in the case of special allocations, JPC should satisfy itself that the allotments have been utilised for the purpose intended by calling for regular returns on production, despatches, etc., and cross checking the same.

8. No adjustment will be made in regard to the allocations made from the reserve quota and the DGS&D quota. However, JPC should ensure that in no case does the sum total of billets received by any individual enroller, from all quotas, exceed his two shift assessed monthly capacity.

9. Billets of the size 125 mm and used rails may be supplied only to those rerollers who have facilities for processing these items. A minimum supply of 150 tonnes per mensem, of size 100 mm and below, should be ensured to each reroller.

10. I am to request that the schedule of monthly allotment of billets on the basis of the above distribution policy may kindly be worked out and intimated as early as possible to all concerned and a copy also sent to this Ministry.

Yours faithfully,

Sd/- A. N. RAJAGOPALAN

Under Secy. to the Govt. of India

Copy to Shri R. P. Sharma, Executive Secretary, Joint Plant Committee, 18, Rabindra Sarani, Calcutta-1.

Sd/- A. N. RAJAGOPALAN

Under Secy. to the Govt. of India

APPENDIX VI

Summary of Main Conclusions/Recommendations

S. No.	Para No.	Ministry/Department concerned	Recommendations
(1)	(2)	(3)	(4)
1.	1-12	CSIR	<p>The Committee had an occasion to review certain aspects of the working of the NRDC and the CSIR in 1969-70. In their 122nd Report (4th Lok Sabha) the Public Accounts Committee had made several observations about the wide gap between industrial research carried out in CSIR laboratories and its utilisation. Taking note of the very poor record of utilisation of processes developed in the laboratories, the Committee had suggested that the Board of Scientific and Industrial Research should regularly make a systematic review of the performance of each of the laboratories from the point of view of their contribution to the industrial production.</p>
2.	1-13	-do-	<p>From the information made available to the Committee in regard to the working of the Central Mechanical Research Institute, Durgapur the Committee find that during 14 years of its existence the Institute has incurred an expenditure of about Rs. 6.92 crores out of which about Rs. 3.87 crores was of recurring nature. During the same period the Institute had developed about 79 processes/inven-</p>

tions, out of which 36 processes/inventions were released to the industry. Out of the 36 processes released to the industry only 13 processes are actually being exploited/ utilised. The total value of the products turned out by using the processes/inventions developed at the Institute has been estimated at about Rs. 60 lakhs which is stated to have resulted in a saving of foreign exchange of the order of about Rs. 48 lakhs. These figures do not speak much about the achievement of CMERI. The Cmmittee feel that in the ultimate analysis the success or failure of any research laboratory will have to be judged on the basis of its impact on the industrial production and the extent to which its efforts contribute towards the goal of self-reliance in the matter of technical know-how. While the amount realised by way of premia/royalties may not be proportionate to that spent in a research laboratory, in the overall context it will have to be ensured that the expenditure on a laboratory of this nature is commensurate with its contribution towards augmenting production and developing self-reliance particularly in strategic and critical areas. Judged by these criteria the success achieved by the Institute can by no means be said to be satisfactory. The Committee would, therefore, strongly urge the appointment of a Task Force comprising representatives of CSIR/CMERI/NRDC, public undertakings and representatives of leading industrial organisations concerned which manufacture engineering goods, so that the research programme can be suitably reoriented in the interest of rendering maximum technical assistance to industry to achieve self-reliance in the shortest time in strategic and critical areas.

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CSIR
NRDC

In their 122nd Report (1969-70), the Committee had *inter-alia* observed that "one reason for the unsatisfactory utilisation of processes developed in CSIR laboratories is the inadequacy of the National Research Development Corporation, the agency through which the processes are released." From the information now furnished to the Committee it is revealed that the situation has not improved since then. Out of 1214 inventions reported to NRDC upto 31-3-1971 only 368 inventions were licensed on payment of royalty and/or premium. The total value of the production from these processes has been estimated at about Rs. 36.20 crores, resulting in the saving of foreign exchange of about Rs. 28.30 crores. In the light of the total national industrial output which runs into several thousand crores annually, the NRDC's contribution is too small to have any impact on the total.

4.

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The Committee note that the Corporation has not at all been able to reduce the time-lag between the availability of an invention and its licensing to the industry. According to CSIR's version the delay varies from "4 months to 3 years or more" before the processes reported to NRDC are released to the industry. The Committee were informed that besides the Administrative Staff College of India who were studying this problem as part of their own programme, the Corporation itself was preparing a report on the subject. The Committee would like to be apprised of the action

taken on the basis of studies on hand. The Committee feel that there should be a 'built-in' system by which the Corporation reviews at the end of each year in consultation with the Research Institutions concerned the reasons for non-exploitation of the processes so that the shortcomings which are coming in the way of their industrial exploitation could be removed wherever possible without delay. The Committee would like Government to closely examine the working of NRDC with a view to making the Corporation really effective as a channelising agency for research processes developed in national laboratories to reach the production line. The Committee also feel that NRDC should be able to gather from the field the areas where research is required so that this feedback can be put to effective use in framing the research programme of national laboratories from year to year.

5. 1.32

CSIR

NRDC

The Committee are also of the view that the Corporation has not been able to achieve any significant success in the matter of realisation of some of its objectives. The Corporation has entered into agreements with some foreign research organisations but so far only two processes developed in India have been licensed abroad. Another objective of the Corporation is to enter into agreements with private firms to develop inventions by trial at their works and to reimburse any loss that may be incurred during these trials. Hence also there has been no worthwhile achievement.

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6. 1.33

CSIR
NRDC

Against this poor record of achievements the Committee find that the Corporation has till the end of 1970-71 accumulated losses amounting to Rs. 32.06 lakhs. For the first time in its existence of 17 years the Corporation made some profit in 1970-71. The Committee stress that NRDC should intensify its endeavours to see that the proven processes and know-how with it are put increasingly to productive use by industry thereby augmenting the earnings of the Corporation by way of royalty/premia to wipe out the losses accumulated over the years.

7.

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CSIR

The Committee are not happy about the working of the agreement between the NRDC and the private firm for the collaborative testing of filters of the firm by the Central Mechanical Research Institute, Durgapur. In the Committee's view the agreement suffered from the following two lacunae:

(i) Under the arrangements agreed to with the firm, the Institute was required to make available facilities for taking up development of 32 filters per month. According to the information furnished to the Committee, the Institute has a capacity of testing approximately 180 filters per year or 15 filters per month. This capacity was stated to have been created over a period from 1963 to 1972. Therefore, at the time of entering into the agreement in 1966, the Institute did

not have the capacity to test 32 filters as had been stipulated in the contract. The firm has sought arbitration alleging that "Institute has not kept its promise and the firm has suffered heavy losses due to the stoppage of the testing by the Institute."

(ii) The other major defect would appear to be the very low rate of royalty of 1½ per cent payable by the firm. It is seen that in all other cases where the inventions/processes of the Institute have been licensed to the industry the rate of royalty payable by the licensees mostly ranges between 2 to 5 per cent in addition to a lumpsum payment in the form of premium. In this case the rate of royalty has been fixed at 1½ per cent only on sales. Moreover, there is no payment of premium as in other cases.

8. 1.75 CSIR

The Committee are also unhappy to note that whereas the Institute expected to earn annually a royalty of about Rs. 0.60 lakh on an expected production of filters worth about Rs. 40 lakhs, the actual realisation on account of royalty, during the first 5 years of the working of the agreement, has been of the order of Rs. 64,644 only. During evidence it was stated that the firm had not been able to submit a complete account of their sales etc., because it remained closed from August, 1970 to April, 1972 and hence the exact amount recoverable from the firm had not been finally determined. The Committee would like the NRDC to take speedy action to work out the amount due from the firm and take speedy steps for its recovery in full.

9. 1.76 -D0-

Now that the exclusive period of 5 years is over, the Committee desire that the NRDC should in concert with the Institute explore

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the feasibility of leasing out the 5 processes so far developed to other suitable parties.

The Committee note that in terms of an agreement between CSIR and the NRDC all processes/inventions developed in CSIR laboratories are licensed through NRDC for commercial exploitation. This agreement, however, does not cover sponsored and collaborative researches undertaken by the laboratories. As has been revealed by the working of the agreement between CMERI and the private firm, the laboratories/institutes do not have the necessary expertise to sell the know-how or collect the royalties etc. The Committee are, therefore, of the opinion that commercial exploitation of all the processes/inventions developed by the laboratories/institutes of the CSIR should be done preferably by the NRDC or in close consultation with the Corporation from the very beginning and this should be irrespective of the fact whether such processes/inventions come under the category of sponsored or collaborative researches.

The DGS&D has been procuring certain items of track fittings such as dog spikes for the Railways. Prior to 1967, the steel billets were supplied to the manufacturers of track fittings by the DGS&D out of the allocation made by the Ministry of Steel for the purpose. In August, 1969, when the control was reimposed the Ministry of Steel announced a new billet distribution policy. In fixing the quota

C.S.I.R.

10. 1.77

CSIR

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Dept. of Steel

11. 2.28

for various consumers the DGS&D's requirement was overlooked. Later on, following representations from the DGS&D and discussions at Secretaries' level the steel allocation for the DGS&D was partially restored to 3,000 tonnes per month as against 7,000 tonnes allowed earlier. In the meantime, the DGS&D was forced to allow the tenders for the procurement of 2241 tonnes of dog spikes opened on 30-5-1969 against 1969-70 requirement of Railways to lapse in December, 1969. In view of the resultant extra expenditure and the deferment of track renewal and construction work on the Railways, the Committee take a serious view of the omission to include the substantial requirement of the DGS&D in the revised policy of distribution of billets. They desire that responsibility should be fixed for the lapse.

Another lapse on the part of the Ministry of Steel was that the DGS&D was left in doubt as to whether he could issue the essentiality certificates for steel billets to the fabricators of track fittings who were not registered as re-rollers. Their letter dated 27th April, 1970 was not clear on this point. It is unfortunate that the fresh tenders for the procurement of dog spikes opened on 5-2-1970 had to be cancelled in August, 1970, as the clarification sought for by the DGS&D regarding the issue of essentiality certificates was not received from the Ministry of Steel in time. Consequently fresh tenders had to be invited when the rates went up further. The Committee, therefore, suggest that the carelessness in drafting the letter dated 27-4-1970 should be gone into.

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Deptt. of Steel
DGS & D

The Audit paragraph highlights several procedural lapses which cost the exchequer an extra expenditure of Rs. 2.69 lakhs. It is unfortunate that the reference made by the Ministry of Supply on 1st May, 1970 to the Ministry of Steel remains untraced. According to the representative of the Ministry of Steel the reference was not at all received and although the reminder dated 13th May, 1970 (with which a copy of the original letter was enclosed) was received in the Ministry, it was not to be found on the relevant file. The Committee desire that DGS&D should find out from their records whether the reference dated 1-5-1970 was actually delivered in the Ministry of Steel and if not responsibility may be fixed for its non-delivery. In case any proof of its delivery in Department of Steel is available it should be furnished to Department of Steel who may take action for fixing responsibility. At the same time the Department of Steel should find out how the reminder dated 13-5-1970 although received in the Department remains untraced. The Committee would like that the action taken by the DGS&D and the Department of Steel in pursuance of the above observations be intimated to them within 3 months.

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Department of Steel

Secondly the Department of Steel which received the letter dated 24th June, 1970, sent a reply only in September, 1970, i.e., after about 3 months. That this delay was due to dearth of staff to meet

the unexpected rush of work in the concerned section of the Department of Steel does not sound very convincing. The Committee feel that in view of the heavy rush of work proper priorities should have been laid down so that urgent items were not lost sight of. At this stage the Committee can only emphasise that such a negligence should not be allowed to be displayed in future.

15. 2-32 DGS & D

The Committee further find that DGS&D has handled the matter in a routine fashion. Keeping in view the period of validity of tenders the Directorate General of Supplies and Disposals ought to have made special efforts to get the necessary clarification from the Ministry of Steel in time. The attention of the Ministry of Steel should have been drawn to the date of expiry of the offer at the appropriate level. The Committee hope that all concerned will take a lesson from the lapse that occurred in this case.
