#### SECRET

## MINISTRY OF EXTERNAL AFFAIR\$

The 22nd November 1955.

WITH THE COMPLIMENTS

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SHRI N.R.PILLAI

Secretary-General

To

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Shri V.T.Krishnamachari, Deputy Chairman, Planning Commission, New Delhi.

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- Note prepared by Shri Mahalanobis and handed over by P.M. to Soviet leaders in Moscow.
- 2. Reply of the USSR Govt.to the above note.

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#### TECHNICAL HELP FROM USSR

- In the Second Five Year Plan great emphasis would be given to the basic heavy industries. USSR has great experience of developing the basic industries from scratch. In fact in certain respects the Second Plan in India would be similar to the Second Soviet Plan. USSR had to pass through a phase of large imports of capital goods and of technical aid of foreign experts, and is aware of the difficulties.
- 1.1 A great deal may be known about many manufacturing processes and yet there may be small sectors of critical importance which are such closely guarded secrets that it is often difficult and expensive and some times even impossible to establish the industry on economic lines without knowing the trade secrets. Soviet help may enable us to overcome such bottlenecks.
- 1.3 USSR can help for example (a) by sending experts to India to give technical advice on lines of development or to give training to Indian personnel in India; (b) by giving training to Indian engineers and technologists in USSR; (c) by supplying equipment; and (d) by active participation in the setting up of factories or specialized projects (as in the proposed steel plant in M.P.).
- 1.4 The point to be emphasized is that USSR should have no objection in giving us information or technical aid or equipment in the case of any process or trade secret which is known to USA or West Europe.

I am mentioning below a few specific items.

- 2.1 Heavy machinery industry. To set up a factory to produce one million tons of steel per year it is at present necessary to import component parts of the value of about Rs. 45 crores (roughly half of the total investment). The proportion of imports is, in fact, very large in the case of heavy machinery. In the draft Plan-frame a high priority has been given to the heavy machinery industry. Technical advice on general lines of development would be of great help.
- 2.2 <u>Aluminium</u>. India is short of copper but has large reserves of bauxite. It should be possible to use aluminium as a substitute for copper in electricals. We produce 4000 tons and import about 3000 tons at present. It has been proposed to increase production to 40,000 tons in the Second Plan. One difficulty is often stressed, namely, that processes for the production of aluminium are covered by patents so that such large royalties would have to be paid that it might be cheaper to continue to import aluminium. USSR has succeeded in developing many new metallurgical processes which are independent of and it would be useful to enquire whether USSR can give technical advice in the case of aluminium.
- 2.3 Prospecting for minerals. Some top-ranking American and Soviet geologists have repeatedly stated that although good work has been done in geological surveys and the preparation of geological maps in India, there is great need of intensive prospecting for minerals. USSR has great experience in this field.

... Petrol,

Petrol, of course, is of the highest priority. I understand a tentative offer was made by USSR about two months ago. This may be followed up by some personal discussions in Moscow.

- 2.4 <u>Electronics</u>. There are some critical sectors in which "trade secrets" are closely guarded in Europe and America. Help from USSR may be of crucial importance.
- 2.5 Precision gauges and measuring instruments. In 1954, I found that large advances have been made in USSR. This sector is of crucial importance and takes a long time to develop. It would be desirable to make a beginning as early as possible.
  - 2.6 Optical Glass. This is another small sector of crucial importance in which there are many trade secrets. USSR has a highly developed optical industry and may be able to give effective help.
  - 3. Management of State enterprises. USSR made many experiments in the management of State enterprises and is believed to have developed an efficient decentralized system. Government factories are managed on what would be called strictly business-like or commercial lines in other countries. Advice and technical help in this matter would be of great value.

कारियाहर, अस्ति । १८०० । १९९६ १९९५ १८७१० २ - १८०० । १८५० । • भागां Gavi. १८०० ।

# Unofficial translation from Russian

### AIDE MEMOIRE

in response to the Aide Memoire on the Indo-Soviet technical co-operation handed over by Mr. Nehru to V.V. Kuznetsov on the 14th June, 1955.

The Soviet Union regards with great sympathy the Indian Government's efforts aimed at the creation and development of the National economy and in particular of the basic branches of heavy industry promoting the strengthening of the National Independence of the Republic of India. In this connection the Government of the USSR are willing to consider favourably the questions of the Indo-Soviet technical co-operation referred to in Mr. Nehru's note of the 14th June, 1955.

In accord with Mr. Nehru's wish the technical co-operation could be developed in the following way:

by sending to India Soviet specialists for rendering technical consultations on the questions of the development of some branches of industry, organization of production, construction of industrial units and introduction of new items of production;

by training in the USSR engineers and technologists being selected from Indian citizens;

by execution of the project-surveying, construction and assembling works and supplying with the industrial equipment;

by supplying with the technical information including patents of different technological processes of production, machinery and equipment. It is supposed that a free of charge exchange of technical documentation, licences and patents between the State organizations of India and the USSR could be established, and only the actual expenses connected with the preparation and transmission of the aforesaid documentation are to be met.

The relative Soviet organizations will be prepared to consider favourably the request of the Indian Government about the co-operation with them in designing, supplying with set equipment and in particular in the construction of such state industrial units as a heavy machine-building works, aluminium plant, heavy electric equipment plant and in the construction of large hydro-technical installments of which Mr. Nehru's Aide Memoire referred to.

The Soviet organizations regard positively the request expressed in Mr. Nehru's note of rendering the technical advices on general questions of the development of heavy machine-building industry as well as of technical consultations on the questions of the production of aluminium on the base of the upto-date metallurgical processes.

Sharing the opinion expressed in the aforesaid aide Memoire about the great significance of the intensive geological surveying for the development of the Indian economy, the Soviet Union possessing considerable experience in this field is able to render its technical co-operation to India, as is already stated by N.A. Bulganin, Chairman of the Council of Ministers

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of the USSR in his talk with Mr. Nehru on the 10th June, 1955. So far as the oil surveying is concerned the negotiations between the representatives of India and the USSR on the practical steps in this regard will be held in Moscow on some near date in accordance with the agreement on matter in question which has been already reached.

to the significance of the development of electronics and the manufacturing of precise instruments, measuring instruments and opties. The technical ecoeperation can be considered to India in this respect as well.

According to the wishes expressed in the Aide Memoire the Soviet specialists can be consulted also on the questions of the management of the state enterprises.

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