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Global Preparatory Meeting  
on the Non-ferrous Metals Industries

Lisbon, Portugal, 22-25 June 1987

REPORT \*

209

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### System of Consultations

The Second General Conference of the United Nations Industrial Development Organization (UNIDO), held at Lima (Peru) in March 1975, recommended that UNIDO should include in its activities a system of continuous consultations between developed and developing countries with the aim of increasing the participation of the latter in world industrial production by means of enhanced international co-operation. Subsequently, the United Nations General Assembly, at its Seventh Special Session in September 1975, supported this recommendation.

In May 1980, the Industrial Development Board decided to establish the System of Consultations on a permanent basis, and in May 1982 approved the rules thereof (The System of Consultations, PI./84) stipulating its principles, objectives and characteristics, in particular:

"The System of Consultations shall relate to co-operation between developed and developing countries and among developing countries themselves.

The System of Consultations would also permit negotiations among interested parties at their request, at the same time as or after consultations.

Participants of each member country should include officials of Governments as well as representatives of industry, labour, consumer groups and others, as deemed appropriate by each Government.

Each consultation meeting shall formulate a report, which shall include conclusions and recommendations agreed upon by consensus and also other significant views expressed during the discussions."

**CONTENTS**

	<u>Paragraphs</u>	<u>Page</u>
<b>PREFACE</b> .....		ii
<b>INTRODUCTION</b> .....	1-7	1

Chapter

<b>I. AGREED CONCLUSIONS AND RECOMMENDATIONS ...</b>	<b>8-17</b>	<b>2-4</b>
<b>II. ORGANIZATION OF THE MEETING .....</b>	<b>18-23</b>	<b>5-6</b>
<b>III. SUMMARY OF THE DISCUSSIONS .....</b>	<b>24-29</b>	<b>6-7</b>

Annexe

<b>I. LIST OF PARTICIPANTS .....</b>	<b>8-9</b>
<b>II. LIST OF DOCUMENTS .....</b>	<b>10</b>

## INTRODUCTION

1. At its nineteenth session in May 1985, the Industrial Development Board decided to include the First Consultation on the Non-ferrous Metals Industry in the programme of consultation meetings for the biennium 1986-1987.

2. In accordance with the above-mentioned decision and the established work programme, the First Consultation on the Non-ferrous Metals Industry will be convened in Budapest, Hungary, between 30 November and 4 December 1987.

3. In preparation for the First Consultation on the Non-ferrous Metals Industry, the UNIDO Secretariat convened a meeting of experts at the world level in Vienna (Austria), from 18 to 21 March 1985, to advise on the selection of the non-ferrous metals to be considered in the First Consultation, as well as on the central aspects to be taken into consideration in preparing the Consultation.

4. In order to make a thorough study of the problems and development patterns of the non-ferrous metals industry and suggest alternative strategies of development within a specific region, the UNIDO Secretariat, in coordination with SELA (Sistema Economico Latinoamericano), convened an expert group meeting in Latin America from 23 to 27 February 1987 in Caracas (Venezuela).

5. On the basis of the conclusions and recommendations of the expert group meetings held and of the work carried out by the secretariat, UNIDO selected the following issues as a basis for the deliberations of the Global Preparatory Meeting:

Issue No. 1: Strategies and policies for the development of the non-ferrous metals

Issue No. 2 Technological alternatives for the production of non-ferrous metals

Issue No. 3 New forms of investment and finance in non-ferrous metals.

6. The main objectives of the meeting were the selection of issues to be discussed at the First Consultation on the Non-ferrous Metals Industry, to be held in Budapest between 30 November and 4 December 1987, as well as to analyse the content of the main background papers to be presented at the Consultation.

7. A list of the documents issued for the Global Preparatory Meeting will be found at Annex II.

## AGREED CONCLUSIONS AND RECOMMENDATIONS

### Preamble

8. The Expert Group Meeting on the Restructuring of the Non-ferrous Metals Industry held in Vienna in 1985 recognized the need to analyse the possibilities for a greater degree of processing of the non-ferrous metals in the developing countries within the framework of an overall concept of national, subregional and regional development that took into account the interrelations of the non-ferrous metals industry with other sectors.

9. That meeting stressed the importance of analysing the changes in investment patterns in order to put into practice new methods of financing which would permit a more effective use of resources available to the developing countries. The meeting emphasized the need to examine and develop in each of the non-ferrous metals industries technological alternatives which were appropriate to the size of developing countries and to the level and type of resources available to such countries, and which protected the environment and health and safety of workers.

10. In that meeting the need was expressed to put into practice new forms of co-operation among developing countries and between developed and developing countries in order to promote a more coherent productive system in the developing world.

11. In the UNIDO/SELA Regional Expert Group Meeting on Alternative Strategies for Non-ferrous Metals in Latin America that took place in Caracas, Venezuela, in February 1987, a recommendation was made to formulate medium and long term development plans for non-ferrous metals that take into account the multiplier effects, both within the sector and with reference to other sectors of the economy. The need to develop studies and research to promote the production of semi-processed and finished products was stressed. 4

12. It was emphasized that developing countries with the most highly developed mining and metallurgical sector should give priority to the provision of co-operation in the form of consultancy and engineering to less developed countries.

13. In addition, attention was drawn to the need for more extensive studies of complementarities of production at the regional level.

14. It was recommended that SELA and UNIDO should consider jointly holding a regional meeting to formulate a common Latin American position before the First Consultation on the Non-ferrous Metals Industry to be held in Budapest, Hungary in 1987.

15. It was recommended by the Global Preparatory Meeting that two regional meetings to formulate common African and Asian, including South Asia and South East Asian, should also be held before the First Consultation.

16. In the framework defined at the earlier meetings and from the work done by the secretariat on the global restructuring process as well as by the participants of the different expert group meetings, it was recognized that:

- (a) The impact of the non-ferrous metals industry on the national economic development of several developing countries was not in accordance with the great efforts made in the allocation of resources; in some countries that impact was even negative;
- (b) there was a need for more self-reliant strategies taking into account the different economic and social situations of the developing countries;
- (c) it was important to increase the linkages of the non-ferrous metals industries with other sectors of the economy, including the capital goods sector. Furthermore a flexible vertical integration process inside the non-ferrous sector should be started which will permit entries to the different levels of processing;
- (d) in adopting new strategies the developing countries should give special attention to constraints related to their limited economic space, the structure and level of world prices and the nature of present and emerging technology;
- (e) the major traditional forms of finance have had a negative impact on the development and control over national non-ferrous metals industries in the developing countries;
- (f) there was a need to increase the use of alternative forms of finance in particular: South-South co-operation including counter trade; national capital either state or private; and financial resources from centrally-planned economies;
- (g) where suitable, the development, adoption and selection of technologies should be made in the framework of promoting an inward development to achieve a more coherent productive system at the national, subregional and regional levels;
- (h) in the development, adoption and selection of technology, due account has to be taken of the volume and characteristics of the mineral resources in different developing countries and the need to establish economical plant size according to financial and market situation, as well as to establish for the relevant equipment the most appropriate design features.

Recommendations

17. Taking note of the complexity of those industries at the global level and of its specificities at the regional, subregional and national levels, the participants at the Global Preparatory Meeting identified the following two main issues connected with the development of non-ferrous metals industries which should be addressed by the Consultation to be held in Budapest, Hungary, in December 1987.

Issue 1: Strategies of development and financial implications

- (a) the changing roles of the main actors which are governments, state enterprises and transnational companies;
- (b) The impact on the national economy of developing countries arising out of previous patterns of development;
- (c) The analysis of new uses of non-ferrous metals in accordance with the needs of all sectors of the economy;
- (d) Inward-oriented development for achieving a more coherent productive system giving special emphasis to internal commercial promotion;
- (e) Policies for the development of non-ferrous metals exports;
- (f) Present sources and alternative sources of finance.

Issue 2: Technological alternatives

- (a) Criteria for the selection of technologies;
- (b) Existing and emerging new technologies mainly in the production of semis and selected finished products;
- (c) Research and development for the creation of internal technological capabilities in developing countries.



## I. ORGANIZATION OF THE MEETING

### Opening of the meeting

18. The Global Preparatory Meeting was opened by the Vice-Director General of Geology and Mines of the Ministry of Industry and Commerce of Portugal. In his opening speech the representative of the Portuguese Government pointed to the most important issues in current world development in the non-ferrous metals industry. He drew the attention to the main problems and underlined the situation of the non-ferrous metals industry in Portugal. He said that the meeting was an excellent opportunity for representatives of the Portuguese industry to learn from the discussions and hoped that the Lisbon meeting would make a relevant contribution towards the preparation of the First Consultation to be held in Budapest, Hungary, between 30 November and 4 December 1987.

19. A UNIDO representative from the System of Consultations Division described the activities undertaken in preparation for the First Consultation on the Non-ferrous Metals Industry, pointing out the main results of the first Expert Group Meeting which took place in Vienna, from 21 to 23 March 1985, and of the UNIDO/SELA Regional Expert Group Meeting on Alternative Strategies for Non-ferrous Metals in Latin America, which was held in Caracas, Venezuela, between 23 and 27 February 1987. He made also a brief summary of the content of the principal studies which were being made by the UNIDO secretariat.

### Election of Officers

20. Mr. Magnus Ericsson (Sweden), consultant of Raw Materials Group, was elected Chairman.

21. A drafting group composed of Messrs. Jorge Gonzalez R. (Bolivia), representative of SELA and Magnus Ericsson (Sweden) was elected to prepare the draft recommendations and conclusions.

### Adoption of the Agenda

22. The following agenda was adopted:

1. Opening of the meeting;
2. Brief description of the preparation for the Consultation on Non-ferrous Metals;
3. Election of the Chairman and adoption of the agenda;
4. Presentation of the secretariat paper on possible issues for the First Consultation on the Non-ferrous Metals Industry;
5. Presentation of the technical assistance programme of UNIDO in the field of the non-ferrous metals;

6. Consideration of the main topics

- Issue 1. Strategies and policies for the development of the non-ferrous metals;
- Issue 2. Technological alternatives for the production of non-ferrous metals;
- Issue 3. New forms of investment and finance of non-ferrous metals.

7. Recommendations of the main issues to be discussed at the Consultation.

8. Consideration and adoption of the report of the meeting.

Approval of the conclusions and recommendations

23. The conclusions and recommendations of the meeting were adopted by consensus at the closing session on 25 June 1987.

**SUMMARY OF THE DISCUSSIONS**

24. A UNIDO representative from the System of Consultations Division introduced Working Paper I, prepared by the secretariat, outlining and summarizing the main subjects to be discussed:

- The World economic situation and its impact on the development of the non-ferrous metals industry in a global perspective;
- Alternative strategies for this industry in the developing countries;
- Technological alternatives and new sources of finance.

25. He stressed the importance of analysing the possibilities and impact of more inward-looking development at the national, subregional and regional levels, as well as the possible repercussions of this line of development on technology, on the economic policy of the countries and on the forms of subregional and regional co-operation.

26. A representative from UNIDO's Department of Industrial Operations presented an overall view of the role and technical assistance of UNIDO to the non-ferrous metallurgical industry in developing countries.

27. As expressed by that UNIDO representative and shared by all participants, the Lisbon meeting was an excellent opportunity to bring together people with technological knowledge as well as those with an economic perspective, and thus contribute to an on-going process of exchange and learning by all those involved.

28. Those participants who had prepared case studies of the developments and experiences of the non-ferrous metals industry on a country basis, made brief presentations, highlighting the strategies of development implemented and the financial and technological aspects.

29. During the discussion the following general points were made:

(a) The domestic needs of non-ferrous products were considered of great importance for most developing countries in establishing their development strategies. The export markets were of importance only to very large producers, or as an outlet for a small part of the total production.

(b) it was necessary to find ways of expanding the market including finding alternate applications and products. Studies of such possibilities should be prepared for all non-ferrous metals considered.

(c) The necessity of finding complementarities between national economies and to expand regional co-operation to promote the markets in developing countries was stressed. An example of such efforts in Southern Africa was presented.

(d) Projects needed to be identified which involved: North-South co-operation particularly in transfer of technology as well as in marketing and financing; and South-South co-operation with participation of the stronger countries such as Brasil or India and the least developed countries.

(e) The role of the world market and the London Metals Exchange in price setting together with the problems of transfer pricing in internal trade transactions within TNCs had limited the development of the non-ferrous metals industries in many developing countries.

(f) Structural changes in the non-ferrous metals industry was taking place at an increasing speed. The recent crisis in the industry had shown a tendency to increase the concentration of the industry as a whole. It was important to follow this process continuously and to understand its implications on the strategies of the main actors and on changes in technology and finance.

(g) The role of the State in mineral enterprises had to be studied further in order to be fully appreciated. Examples were given from India, Malaysia and Zambia.

(h) The use of a relevant national price instead of uncritically using the world market price or the LME quotation when doing feasibility studies and profitability calculations was underlined with an example from India.

(i) The socio-economic implications of the restructuring process at present led by the major TNC's mining companies had to be very carefully considered.

(j) New sources of finance had to be carefully examined particularly considering the level of interest and other terms, the relation between interest and commodity prices, currency fluctuations and possibilities of South-South co-operation. In the process of selecting suitable financing there was need for increased transparency of the financial market and support from independent advisers.

(k) There was a need to centralize and coordinate information on present and planned research and development projects as well as available facilities and institutions to carry out such work in developing countries.

Annex I

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**List of Documents**

**Discussion Document I**

Possible issues to be submitted to the First Consultation on Non-ferrous Industries

**Discussion Document II**

The development and restructuring of the non-ferrous metals industries

**Discussion Document III**

Technological alternatives in the aluminium industry

**Discussion Document IV**

Technological alternatives in the copper, lead, zinc and tin industry in developing countries

**Information Document (prepared by IO/MET)**

The role and assistance of UNIDO to the non-ferrous metallurgical industry of developing countries