

# الجمهورية العربية المتحدة



## مَعْمَدُ التَّخْطِيطِ الْقَوْمِيّ

Memo. No. 253

International Coordination of  
Plans of Development Amongst  
The Socialist Countries

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24th November 1962

Reprint August 1966.

القاهرة

٣ شارع محمد منور - الزمالة



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## INTERNATIONAL COORDINATION OF PLANS OF DEVELOPMENT AMONGST THE SOCIALIST COUNTRIES

It has become evident that national economic activities in general and planning in particular are more and more linked with international problems in this field going beyond foreign trade matters. This is entirely true with respect to those socialist countries which are members of the Council of Mutual Economic Aid (CMEA), too. They already started systematic work to coordinate their national plans in the long-run. This will affect basically, without doubt, international economic relations between them and exert a certain influence on other international economic affairs. In order to make these tendencies clear and to get a good idea on the basis, principles and prospects of these international activities we shall study, first, the question what the starting point of international coordination plans in the CMEA - countries really is.

### I. The Economic Basis for International Coordination of National Plans

The emphasis given now to international cooperation in the field of production among CMEA - countries has been caused, primarily, by two economic factors:

- (i) Modern industrial (and, to a certain extent, agricultural too) production asks for, at least, large series or even mass production as a presupposition of profitable output with using modern large-scale capacities fully, i.e. to utmost technical; technological and economic limits.
- (ii) All member-countries of the Council of Mutual Economic Aid now have an own multi-branch industry regardless of the still existing differences in productivity and other respects.



Hence arises the question: what are the consequences of these two problems which are closely related to each other? It is the experience of planning in the late fifties that, at a given high level of industrialisation, planning activities must cover a rather long period of time exceeding the traditional five-years calculations. This had become obvious for the first time in 1957/1958 in the USSR. At that time prospections for mineral deposits reached very good results: vast areas proved to be rich of iron ore, coal and other elements of natural wealth. Measures had to be taken, immediatly, to utilize them. The last two years of the five-year-plan (1959 and 1960) which was in force, were found not to be sufficient for utilizing the newly prospected mineral deposits fully; calculations made by experts revealed that it would ask, for drawing up a new plan covering 1959-1965 (seven-year-plan) which could solve both problems: to start immediatly utilization of the recently prospected iron coal etc. and to arrange completely all things connected with this activity (e.g. building of access railroads and roads to the newly explored areas, to develop and produce new equipment for utilization of natural wealth).

Thus, all the national economy proved to be affected and, consequently, the national plan in its main proportions and targets, too.

What is to be pointed out here is that planning activities are to a great extent affected or, more precisely, determined by the technical development, by its prerequisites (as e.g. by the a.m. prospecting activities) and by its consequences.



This observation was confirmed by another experience of national planning. Not later than in 1956/58 it was felt that time is over when the main targets of industrial production had been determined, preferably, by two major factors: (i) to establish new branches of industry or to develop those on a low level in order to make the country an economically advanced one; this meant to industrialize socialist countries rather at a full scale. Besides national independence is always based on a, at least, multibranch industry; (ii) to increase industrial output at a high rate of growth and with good quality in order to meet the fast increasing demand of industrial products within a very short period.

Up to this time, perhaps, it has been possible to draw up a plan of industrial production taking into consideration as a pattern the traditional structure of industry in the advanced countries. Moreover, sometimes targets of industrial plans had been determined, though partially, only by the non-existence or shortage of certain production.

As a matter of fact, planners of the socialist countries faced a new situation in the late fifties. All member-countries of the Council of Mutual Economic Aid had changed their economic character at that time, all of them now having an industrial production which considerably exceeded pre-war level. The structure of the industrial production which considerably exceeded pre-war level. The structure of industry, simultaneously, had changed basically.

The new task of planning, therefore, was to develop an industry with the view to model its structure, level and volume on the accomplishments of technical progress. Once there is an industrial apparatus available attention must be paid, predominantly, to the problems of planning technical and technological



progress, which asks for a detailed analysis of each productive process in all branches of industry. Moreover, when industrial production has reached a high level and covers almost all branches or, at least, most of them, its further development depends upon its qualitative tendencies, i.e. upon the development of its technical and technological basis. The starting point, of planning production, therefore, became the detailed planning of technique and technology. Structural and quantitative changes in industry are to be derived from these two matters.

Summing up we can state that at a given high level of production and with the existence of a large scale of branches (or with even full scale) planning of production (in industry) becomes somewhat like anticipating the results of the tendencies of technical and technological development which already started at present time. The planner is now facing the problem to analyse these tendencies and to foresee the lines they are likely to go and to "translate" them into concrete economic targets of the plan in accordance, of course, with the other conditions and aims of the plan in general.

Modern technique and technology cannot be applied without large series and mass production. Remarkable efforts and investments are inevitable if any industrialized country tries to keep ahead in this respect with all kinds of industrial production. The CMEA-countries which began to pay more attention and to spend more funds to technical advancement found themselves not in the position each to keep all branches of industry on an equally high level only by their own efforts and funds. Modern industry is a complex of unnumerous branches, but the economic power of any country is limited. In addition



to this, modern industrial production is run by large projects the output of which will surmount in many cases the local demand. Any country now has to decide how to bring its own relatively limited economic power in accordance with the pressing necessity of keeping all branches of industry at a high technical level which moreover, is improving steadily. As modern technique and technology request many economic efforts, and the CMEA-countries found their respective economic potential relatively insufficient, the whole problem, therefore, could not be solved on the national level. This was possible only joint efforts of some countries. It was a matter of course that all member-countries of the CMEA decided to tackle this problem by joint activities because international measures are likely to be very effective if they are taken by countries with the same socialist economic system or, at least, with the same principles of foreign policy.

As it can be seen the objective development of technique and technology as well as their economical application induced international cooperation, the character of which differs from international cooperation in the previous period. It now must start already in the preparatory stages of technique and technology which are called research and development. The results of work in these stages, however, mainly determine - as it had been mentioned before - the structure and volume of industrial production. This is why international cooperation is to be understood as cooperation in the field of production, officially known as direct cooperation. Foreign trade, once the main method of international relations between the member-countries of the Council of Mutual Economic Aid, has now become the way of realisation of direct international cooperation in the field of production. It has



to serve and to further specialized and technically advanced industry as the basis for general economic progress. International cooperation and, consequently, international coordination of national plans does not start any more when the process of industrial production had been already finished but it will begin just before the first good will be produced.

It needs no special stress that this line of international organisation of industrial production leads to a decrease in cost of production, and to an increase of productivity.

We called the new way of planning some sort of anticipating the economic results of technical progress which is to come. We had in mind to stress that one basis of (long-term) planning is the future structure of industrial production which is the result of technical progress. There is, however, a complementary basis for long-term planning and international coordination of national plans. This is the present volume and structure of industrial production in all countries concerned.

It is generally known that CMEA - countries had undergone a process of industrialisation during the fifties on the national level (cf. Memo. No. 194). This process now will continue on an international scale. The results of national industrialisation, therefore, form a rather solid basis for international cooperation, but not because they are existing and must be taken into account willy-nilly. We must estimate this fact from a principal point of view which was already confirmed by the experience of socialist planning.



International economic relations depend to a great extent upon the variety of products which can be exchanged and upon the level of productivity. If we neglect the second factor, productivity, or assume that it is equal in all partner-countries, the exchange of goods will be or can be rather extensive the greater the number of branches of industry is. There exists a direct relation between the variety or number of branches of industrial production and the number of goods ready for exchange. Moreover, if the number of branches of production is increasing this will affect not only the number of exchanged goods but even the volume of foreign trade. If one wishes to develop foreign trade it becomes inevitable to develop a large-scale industrial production. But as far as foreign trade is understood as a form of international economic relations, a large scale industry must be developed on a national level, first. Thus, national industrialisation is the precondition for national independence and for an advanced and extensive foreign trade. It can be stated that a close international cooperation or even international coordination of plans as it is intended by the socialist countries is objectively possible only if those national economies which are to be coordinated have been industrialised to a certain minimum. This conclusion must be stressed because international cooperation and coordination of plans does not aim at coordinating mono-branch countries which implies a low economic level and national dependence.

If so, international cooperation with a view to specialisation of national production is determined by the stage of national industrialisation. If so, furthermore, international cooperation and coordination of plans must be defined as specialisation of national production branches, sub-branches and even



by single products. International cooperation etc., therefore, will not involve the liquidation of branches in the countries concerned because this would besides other problems, as a matter of fact, deprive international cooperation of its basis and the number and volume of goods exchanged would be reduced.

The Present structure and volume of national industrial production and a relatively high stage of industrialisation, are, therefore, the second, complementary, basis for international cooperation and coordination of plans in the l.m. sense of national specialisation or international division of Labour. At this moment the problem discussed will meet the problem of technical progress and the uncapability to maintain it in all branches of industrial production only on the national level. After the initial industrialisation, which is necessary for all countries, national economic power will prove to be relatively limited to develop further nationally all branches of industrial production. This would also be of rather a small efficiency and waste national funds.

As a modern industry requires a fast increasing variety of goods on a high technical level and owing to the fact that a national economy is not in the position to manage this manifold production economically and technically, the problem must be solved on the international scale. International cooperation involving specialisation of national production, therefore, is the only way for further national industrial progress after the initial industrialisation had been accomplished.

The urgent necessity of international cooperation and coordination of plans which the socialist countries are facing must be discussed also from a third point of view. It is true,



that this is the practical outcome of what has been said before but it deserves, nevertheless, special consideration.

To make it quite clear, all socialist countries of the Council of Mutual Economic Aid now are definitely industrialised with the exception of Mongolia, but they are so not on the same level. There are, consequently, some advanced national economies, as e.g. the German, and a series of less industrialised ones.

Technical progress causes, as a matter of fact, a fast increase of the number of new products predominantly in the processing industries. The German engineering industries, e.g. are producing (1961/62) about 30.000 various goods out of a total of 36.000 which are usually necessary in an advanced national economy. All these 36.000 products of engineering must be available in order to maintain industry on a high level. But partial attempts to produce all of them in German industry failed. The result was an increase in the number of goods but a decrease in the magnitude of series. There arose a contradiction between the series production decreasing on the one hand and the technical and economic necessity of increasing series as a precondition of increase in productivity on the other. It was decided to take urgent measures to reduce the number of products in engineering and, simultaneously, to extend large series production. If not so, the German national economy would not be able to keep up a high rate of growth. This decision to reduce the scale of produced goods implied the offer to other countries of the CMEA to take over the production of these goods. This way would provide both advanced and less industrialised countries the possibility of concentration of industrial production. As far as the less advanced



national economies are concerned they are now in the position to draw up their plans of industrial production on the basis of large series because they now have to supply e.g. the German industry with those products taken over from it. Productivity would increase and foreign trade, too. The less advanced countries, moreover, now are able to increase their rate of growth due to the fact of concentration of engineering. This increase in the rate of growth is one prerequisite of bridging the gap between the different levels of economic development of CMEA-countries.

Concluding we can state that the problem of international cooperation and coordination of plans proved to be very pressing for the most advanced socialist countries and it provided the other countries, too, the possibility of faster going ahead in industrial production.

Last not least international cooperation and coordination of national plans has been caused also by social factors. The member-countries of the CMEA have finished all basic changes in the internal political, social and economic structure which are necessary for the abolishment of feudalism. They are now going ahead to form the new social system of socialism finally, and to envisage first measures in the field of economic preconditions of the later communist era. These preconditions can be defined as a high level of education of all people and skilled labour, a high level of productivity and an advanced industrial and agricultural production which is enough to provide an abundance of all goods necessary for the well-being of mankind. This simplified definition reveals that the social aims of the CMEA-countries in the long-run coincide with the general policies and planning



activities in the field of production on a high technical level.

International cooperation and coordination of plans will contribute to a significant increase of the economic power of the CMEA-and all other socialist countries. This is believed to be the most important basis for the peaceful coexistence and for the final and peaceful defeat of the imperialist and colonial system.

While discussing the problem of the economic basis or the starting point of international cooperation and coordination of national plans we may not limit our considerations only to principle considerations. We must be well aware of the economic potential the CMEA-countries which is to be coordinated.

If we try to define the general economic character of the member-countries of the Council of Mutual Economic Aid we find that they be divided into three groups:

- (i) Industrial countries: e.g. USSR, Czechoslovakia, German Democratic Republic;
- (ii) Industrial-agricultural countries: e.g. Hungary, Bulgaria;
- (iii) Agricultural countries: Mongolia.

As most of the member-countries with more than 95% of the total economic potential belong to the groups (i) and (ii), the bulk of this potential being concentrated in the first group, it becomes evident that the international cooperation and coordination has to deal with, predominantly, an industrial complex. This complex comprises exclusively all branches of modern industrial production and disposes of rich mineral resources with the exception of only few raw materials such like caoutchouc and other tropical products.



It is useful, now to realise what are the main results of planned economic development in the countries concerned during the post-war period when these countries had exercised economic cooperation on a lower level and had a given special emphasis to national industrialisation without having the possibilities of setting up an ample system of international division of labour as it is now envisaged.

- a) The gap between the industrialised and former agrarian countries has been diminished this can be seen from the following selected data:

% out of total industrial+agricultural production <u>1/</u>			
		Industry	agriculture
Bulgaria	1939	25	75
	1960	69	31
German Dem. Rep.	1960	87	13

- b) Industrial development in the former underdeveloped countries of eastern Europe has been based, above all, on a rapid growth of investment goods production has changed as follows:

% of investment goods out of total industrial production <u>2/</u>		
	1937/39	1958/59
Poland	47	52,5
CSSR	49,3	58,5
Hungary	44,8 (heavy industry)	64
Rumania	45,5	58,9
Bulgaria	22,6	45,5

1/ Sources: Statistical Yearbook of the GDR 1960/61 p. 176  
Die Wirtschaft No. 36/1961 p. 16.

2/ cf. "Einheit" No. 6/1961 p. 876, Berlin.



- c) The industrial development resulted in a significant increase of machinery export of all CMEA-countries including, especially, the smaller ones; percentage of machinery export out of total export:<sup>1)</sup>

	<u>1950</u>	<u>1960</u>
Bulgaria	0,02	13,6
Hungary	23,0	38,0
GDR	----	48,4
Poland	7,8	28,0
Roumania	4,2	16,6
USSR	11,8	20,5
CSSR	26,4	45,1

- d) The fast increasing production of equipment, being the most essential feature of industrialisation, was the basis for a high average rate of growth of total industrial output:<sup>2)</sup>

1951-59 = 13,7% (all socialist countries)  
 14,4% Bulgaria  
 13,1% Poland  
 11,9% USSR  
 11,6% GDR  
 10,8% Czechoslovakia

- e) The accomplishments of national industrialisation on the one hand and the first measures taken in the field of international coordination of plans on the other improved significantly the rate of growth of foreign trade between the socialist countries

1956-1958 8,5% p.a.  
 1959-1961 1,2% p.a.

1) "Sozialistische Planwirtschaft" No. 8/9 - 1961, Berlin, p.10

2) "Statistische braxis No. 2/1961, Berlin, p. 50.



This rate began to exceed the rate of growth of industrial output (1968-1961 = 13% p.a.)

- f) The share of all socialist countries (including also non-member-countries of the CMEA) in world industrial production rose remarkably from 27% (1955) to 37% in 1961. In 1950 it had been 18%.

The international cooperation of the CMEA-countries will be exercised on a vast area with an extensive agriculture, with a large manpower potential including a high percentage of skilled labour and with an industry on a high technical level the rate of growth of which will constantly be exceeded by the rate of growth of foreign trade. By this way the CMEA area will take a greater part in world trade which now is by far lower than its share in world industrial production.

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## 2. THE NEW SYSTEM OF INTERNATIONAL ECONOMIC RELATIONS

We have already learned what the economic basis, substantially, of international cooperation is like. It must be stressed, too that the member-countries of the Council of Mutual Economic Aid officially declared international coordination of their national plans to be the central task in the work of the Council during the next period.

International coordination of national plans, of course, cannot be merely some sort of formal addition of national targets with adjusting data if the results of such activities should prove to be rather contradictory or not to lead to an equilibrium on the international level implying, of course, national equilibrium. International coordination is understood to form a rational and well-balanced economic organism broken down by national economies and fitting in the world system of division of labour. Basic to it are the economic factors described in section 1.

In other words: it is not intended to have an international coordination ex-post, i.e. when the national plans already had been worked out so that, practically, coordination would be limited to coordination of surplus and deficit items in the balances of national plans. International coordination has to be ex-ante. The prospects of international economic development and, consequently, of international cooperation must be taken into account already when the detailed national plans are drawn up. Actually, international coordination is to be executed, mainly, on the national level and only partially by the competent organs of the Council of



Mutual Economic Aid. No international planning authority, therefore, is necessary. Following this way, there will be an interdepending and proportional economic system with manifold lines of international relations in the broadest sense of the word.

The ex-ante concept, therefore, asks for a model which could serve as guidance and criterion for national planning with respect to international coordination. It excludes, virtually, the necessity of an international treaty in this field because it has its origin in the internal economic tendencies both on the national and international level.

Recently, this model of international cooperation and coordination of national plans, worked out under the auspices of the Permanent Commission for Economic Affairs of the CMEA, has been adopted by an international conference of the heads of the member-countries held in Moscow at the beginning of June 1962. It is officially known as "Basic Principles of International Socialist Division of Labour". This outline is the basis for all detailed activities, bi- and multilateral negotiations of the CMEA-countries during the forthcoming period of elaborating long-term plans up to 1970/80.

We are now going to discuss these principles. It is useful to divide them into two groups, the first comprising the lines of development and coordination of branches while the second is dealing with the consequences of the branch-principles for the national economy and its structure as a whole.



## 2.1 Coordination of branches

### 2.11 Raw material, fuel and electric power

These branches are to be developed, principally, in all member-countries to limits determined by natural factors and by the economic power of the respective country. The first practical consequence is that each country is requested to do its utmost in the fields of prospection of mineral deposits.

The German Democratic Republic e.g. is in charge of prospections for petrol and natural gas which already have been successfull. It is enjoying personal and technical assistance from the USSR and Roumania which are specialised producers of respective equipment. This cooperation is based on, first, overall international cooperation including national specialisation in producing this equipment and, secondly, on bilateral technical and scientific assistance agreements.

The extension of raw material production and power generation and its international coordination will be planned and executed from two points of view:

- (i) Due to the fast increase of processing industries each member-country is expected to provide its industry with raw materials at a large extent on account of its own resources. This is meant not to impose too much expenditure for developing raw material production ( a very capitalintensive one) on the neighbouring countries which, perhaps, would prove to be unable to develop their own processing industries at a high rate of growth.

The mobilisation of national raw material resources will relax the tension in raw material supply and provide, if total sources and uses (demand) are balanced nationally, real information on the shortage of certain basic materials.



(ii) On the basis of international balances of deficit raw materials showing total international sources and uses, member-countries are requested to reconsider the drafts of their plans with a view to allocate more funds for the increase of production of such deficit raw materials. It is a matter of course, that special attention is paid to those raw materials which it is difficult to obtain on the world market or which can be purchased there in insufficient quantities because currency earnings are limited or which are subject to embargo regulations of the western countries.

It has been pointed out that raw material and power production is to be full-scale in all member-countries of the CMEA within the natural and economic limits of the respective country.

In the German national economy special attention had been paid to the mining of own iron ore in the early fifties. This is very acid with rather small contents of metal. For processing it a entirely new system of blast furnaces had been developed and large metal works had been built. Any further extension of iron ore mining in the GDR would absorb a relatively too great part of the accumulation fund and effect the general rate of growth. It was found more effective nationally and internationally, to develop the German iron ore mining sufficient to supply the specialised metal works for acid iron ore in order to use their full capacity. Simultaneously, iron ore mining in the USSR is to be extended in order to meet the demand of the GDR-metallurgy.

Another example is the brown coal mining in the GDR which will be extended rapidly in addition to the introduction



of oil as a second raw material basis for the chemical industry and in spite of geological conditions becoming more complicated. This had been decided because gasification of brown coal is highly efficient.

The main restraint on the production of raw materials is coming from its capital-intensity. This, of course, affects preferably small and less developed countries. In order not to confine raw material production to the limited resources of single countries, bi-or even multilateral projects are to be carried out with the partaking of those countries which declare their interest in such projects.

Czechoslovakia e.g. requested from the GDR a greater quantity of  $K_2O$  fertilizer than it had been originally fixed in the trade agreement. The German government was not in the position to meet this demand due to limited funds unless Czechoslovakia will regard it possible to finance further investments (exceeding those already planned in this branch. This is an example on a bilateral basis. But similar problems sometimes, must be solved on a broader level. Hungary, e.g. is very short of resources for power generation. Besides it belongs to the group of small countries. With the view to full utilization of its rich bauxite deposits the processing of which is extremely electricity-intensive it became necessary to settle this problem internationally. It had been decided by the CMEA-members to set up an international high Voltage transmission grid (cf. Memo. No. 194 p. 8) which, general is to make use of the different peak-hours in demand of electricity by the countries switched together in this grid thus stabilizing the utilization power capacities. But with special respect to Hungary it was agreed that the USSR



is to export, in addition to this, electricity as much as to cover in 1965 8% (and in 1980 25%) of total demand in Hungary ( = 1 Billion / KWh which is necessary to produce 60.000 tons aluminium.<sup>5)</sup>

This solution is the most rational one, both nationally and internationally. Hungary gets rid of the permanent shortage of electricity without spending extensive funds on an adequate increase of local power generation. It has more funds available for projects in other (processing) branches. part of the expenditure for greater power supply is imposed on the Soviet economy being the most developed one out of CMEA-countries. But even this expenditure is relatively and absolutely limited if compared with the funds usually necessary to increase power production by 1 billion KWh. This is due to the fact that power export from the USSR to Hungary is to be transmitted by the already active international grid (cf. Memo. 194) which is based, first of all, on mutual power supply according to different peak-hours. This method makes it possible to increase power generation without new investments except those for a special high Voltage international transmission line. As a matter of fact, this expenditure was the lowest possible. This solution of raw material and power production problems being very effective on the national and international level, proved to be a typical pattern for the international coordination of national plans by CMEA-authorities. Except these advantages, power transmission by high Voltage transmission lines is far less expensive than the railway transport coal necessary for the running of additional power plants in Hungary which inevitably must have been built in case the electricity were not imported.

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1) The electric power systems of Hungary and the Ukraine were linked together on July, 10, 1962.



It is another principle of planning and international coordination to develop enriching enterprises and processing industries near the place where minerals are mined. The general incentive for doing so is the affect on transport costs which, usually, prove to be smaller if manufactured goods are sent to the consumer's place instead of mass goods. But with respect to socialist international cooperation there is to be taken into account another factor which is of far greater importance for the national economy than low transport costs. Raw material production has to serve as a basis of national industrialization (in processing branches). It had been mentioned in section 1 that countreis with a low industrial level or with prevailing raw material production are no good partners in foreign trade. This is true, also, in the field of international cooperation. The CMEA, therefore, agreed on the principle

"toprocess raw material principally on the place where it is produced to such a stage at which costs of production and transport according to the conditions and needs of the (on the basis of agreements between them) are least".

In consequence of this, practically, there will be no international cooperation between raw material producing countries on the one hand and manufacturing one on the other.

As an example can be regarded Bulgaria. Some years ago rich copper ore had been found. Bulgaria is now exerting great efforts to start copper production on the new place (Central Bulgaria) which is to amount to 20,000-25,000 tons annually in 1966. Due to this significant increase in Bulgarian copper output it had been agreed on the international level that Bulgaria is to give



emphasis in national long-term planning to electro-technical engineering which a major consumer of copper. In order to make mass or at least large series production in this branch possible it had been agreed, moreover, to shift output of various already internationally standardised electric motors from the GDR to Bulgaria. Bulgaria has now, of course, to serve the German demand with respect to these products. Bulgaria is now in the position to process a high percentage of local copper production by the national industry.

Concluding we see that the main problem is to develop raw material production rapidly in order to meet the fast increasing demand of the processing industries which implies, of course, that raw material production must be ahead of the growth of semi-fabricated and finished goods. This greatly affects electric power generation as the first prerequisite of technical progress.

## 2.12 Metallurgy

With a view to the fast increasing engineering industries in CMEA-countries all of them are to develop their metallurgy at a high rate of growth according to their respective raw material basis and to the possibilities of rational raw material imports. International cooperation offers itself in this field because of the uneven distribution of respective mineral resources and of the capitalintensity of iron and steel production which is, naturally, less favourable to smaller countries. It is regarded appropriate, therefore, to develop full-scale metallurgical production (full-cycle) only in those countries which dispose of large mineral wealth, both



iron ore and coal or, at least, one of them (e.g. Czechoslovakia, USSR, Poland). This is meant to reach maximum output of steel by CMEA-countries as a whole.

This first line of international coopération in the field of metallurgy is completed by another way of international distribution of labour. While the first concerns total output of steel, the second line is that of national specialisation on different types of metallurgical production, i.e., practically, types of rolled materials. This method aims at:

- (i) increasing total output of steel by types of rolled materials due to organisational improvements involving reduction of the number of nationally produced types; as a matter of fact, output will be extended without adequate investments;
- (ii) furthering foreign trade (both as far as its volume and structure are concerned) by a rapid extension of exchange of semifabricated goods which is the consequence of national specialisation on a limited number of types of rolled steel. (On the CMEA territory 4,8% of total output of rolled stock had been exchanged in 1960 as against 2,46% in 1955 and 2,65% in 1950).

The practical results of these principles are the following as far as the German Democratic Republic is concerned:

The GDR is very poor of metallurgical raw materials. Its national economy depends on large imports in this field, any way. The main role it has to play on the international level is to be major producer of equipment in general. This asks for large quantities of steel thus aggravating the difficult situation, i.e. the discrepancy between the small



metallurgical basis and the fast growing metal-processing industries. The German State Planning Commission has, therefore, drawn up an outline concerning structural problems of both metallurgical and engineering production:

- (i) The German engineering is to be concentrated on equipment and instrument production of low material intensity thus diminishing the above mentioned discrepancy by minimizing demand of metal (steel).
- (ii) The German metallurgy is to increase rapidly output of second-stage rolled materials and stainless and heat-resisting steels which are necessary for engineering production described in (i).
- (iii) In connection with (ii) the GDR takes a greater part in international cooperation as far as specialised production of rolled materials is concerned.
- (iv) The GDR does not intend to extend anymore pig iron production with respect to relatively high costs of transportation of iron ore and coke. This involves higher output of pig iron to limits possible by improved utilisation of blast furnaces already active; but no new blast furnaces will be established. Higher steel production will be based on increased pig iron imports from the USSR.

This conception has already been approved by the CMEA and first steps have been taken to put it into force. As a consequence of it, the GDR will not be able to concentrate steel production to an extent possible in other CMEA-countries because demand of stainless and heatrestisting steel is rather small with respect to each type. It does change, in addition to this, often. This obvious disadvantage can be



compensated by the higher efficiency of concentrated production of highly processed goods, i.e. equipment and instruments. This high efficiency is the result of larger series and the higher prices which these goods will fetch in foreign trade.

Preliminary estimates of total output of steel in 1980 arrived at the following targets:

USSR	250	m. tons	(1960=65	m. tons)
Poland	24	"	(1959=6,1	" )
Roumania	17,8	"	(1959=1,4	" )
all CMEA-countries	330	"	(1960=86	" )

This remarkable increase asks for great efforts by the USSR, Czechoslovakia and Poland to extend the respective raw material basis (these countries are rich of iron ore and metallurgical coal), for a considerable specialization in rolled material output as well as for an improved utilization of existing capacities in steel and metal making. These tendencies will be accompanied by a faster increase of Soviet pig iron exports if compared with Soviet iron ore exports.

### 2.13 Chemical industry

Detailed analytical work of the CMEA resulted in the recommendation that it would be appropriate to **have** an extensive chemical production in all countries of the CMEA area. Basic to this are the following considerations:

- (i) Chemical industry is one of the most modern branches of national economy providing a new and diversified raw material basis.



- (ii) In this branch automation can be introduced in rather all productive processes. It proves to be a most rational field of making full use of up-to-date technologies and technique.
- (iii) As a consequence of (ii) chemical industry is subject to mass production with high productivity and low costs.
- (iv) The local demand of chemical products can be described as very high with a distinct tendency of fast increase and diversification as well.

Chemical industry, generally, is characterized by its ability to meet both modern technical and economic requirements. This is why all member-countries have been urged to give more emphasis to it.

With a view to make these general recommendations more concrete it has been agreed to accelerate national chemical production, preferably, on 3 lines:

- (i) plastics
- (ii) other synthetic products (artificial fibres)
- (iii) mineral fertilizers

These groups of chemical products represent a solid raw material basis for a large series of processing industries (engineering and light industries) and agriculture as well. They are already given priority in national planning.

These three main branches of primary chemical production are to be developed, principally, on the basis of national mineral deposits. The German chemical industry, e.g., is based on brown coal in view of the mining of about 240 Million tons annually, which is first place in world production. In Poland the respective basis is hard coal (105 mio tons p.a.) and also sulphur.



While national production in these fields is almost the same in all CMEA-countries as far as its structure is concerned international cooperation will proceed on the following lines:

- (i) Exchange of documents and data of the most advanced technologies and techniques in production of plastics, fibres and fertilizers throughout the whole CMEA area. This is the shortest way of utilizing the recent results of science and practical experience achieved by the country which is first in the respective field. This form of international cooperation includes, too, exchange of documents for the construction of large chemical works. This form of international cooperation is executed by bilateral agreements.
  - (ii) Member-countries of the CMEA started recently joint research work also in field of chemical production. The results are, of course, accessible to all of them.
  - (iii) CMEA-countries are granting credits to each other in the form of deliveries of chemical and other equipment necessary for the extension or establishment of capacities in the a.m. branches of chemical production. These credits are repaid to the creditor as a rule, by exports of products from the projects which had been built, totally or partially, by them. Among these credits were e.g. deliveries of equipment to Rumania from Poland, Czechoslovakia, and the German Democratic Republic (reed-processing factory in the Danubian delta area), from the USSR to Germany for various projects etc.
- These credits both bilateral and multilateral are granted in accordance with the international agreements on



nationally specialised production of chemical and other equipment. This is true with respect to the deliveries of products from the new projects by which the credits are returned.

Besides the principle to develop production of the main chemical commodities on the available national raw material basis there is followed another principle of international cooperation in the field of chemical industry: to produce chemical commodities of such imported raw materials, the processing of which by far outweighs the expenses for transport due to the possibility of their complex utilization.

By this way, the evident shortage or even absence of various mineral deposits which are important raw materials for the chemical industry hampering the development of certain branches of chemical production can be overcome. This can be done even in full accordance with the principle of full scale development of basic chemical branches in all CMEA-countries on the one hand and the principle of keeping costs of production at the lowest level by means of international cooperation of national plans on the other.

The construction of an international pipeline-system (cf. Memo. No. 194) must be regarded as the first practical consequence of this principle. This system which, being partially already in action, connects Hungary, Poland, Czechoslovakia and the GDR with the rich oil fields of Kuibishev (USSR) will help to establish a second raw material basis for many branches of chemical production and to improve the relation between the different sources of primary energy in favour of oil. It is generally known that chemical production based



on oil is very high productive and the number of final products made of it is increasing steadily. As soon as the new oil-processing factories in the destination-countries of his pipeline system will work at full capacity these countries will go ahead faster than before when their chemical industry had been based only on coal. The German oil processing combine e.g. which is already under construction will have capacity of 8 million tons p.a. and a productivity per worker p.a. of 400.000 Mark; the average productivity in the chemical industry had been 60.000 Mark in 1960.

Concluding we can describe international cooperation in the field of chemical industry as a system of diversified exchange of final products in all respective branches while each CMEA-country will develop all branches producing basic chemical commodities. This makes both ends meet: to set up mass production exceeding in many cases local demand and to make available extensive funds which are necessary for the construction of modern chemical enterprises and which, usually, could not be mobilized by smaller countries if they were induced to develop full-scale chemical production. The last point is confirmed by another fact. Chemical equipment is out of date at rather regular intervals of 7-8 years. To keep chemical production on a high technical level in all its branches, the extraordinary costs involved must be evenly distributed among the CMEA-countries. The principles of international cooperation in the field of chemical industry are meant to cope even with this technical-economic problem.



## 2.14 Engineering

Metal-processing branches are the nucleus of modern industry with engineering being the centre of metal-processing. It has already been pointed out that national industrialisation is an important precondition of international cooperation with the view to improve the system of international division of productive resources. Industrialisation, however, is mainly based on a national engineering industry. The CMEA, therefore, agreed on principles of international cooperation which take into account that the development of engineering on many lines is vital to all national economies. Each member-countries will continue, therefore, the development of a large number of branches in this field and, last not least, establish new branches in consequence of the permanent technical and technological progress. International cooperation implies measures providing the possibilities of a relatively faster increase of engineering production in those countries which are less developed in this respect. This is another way of abolishing the actual differences in the CMEA area as far as the level of economic advancement is concerned.

It has been envisaged, furthermore, to take into special account the present structure of national economies as well as the nationally planned improvement of this structure. With respect to this internationally specialised producers of certain machinery and equipment will be, preferably, such countries the economic structure of which asks for special supply of these machinery and equipment. The German Democratic Republic, e.g., is the main producer of equipment for open-cast brown coal mining due to the fact that this branch (brown coal mining) is one of the essential ones of the German economy.



The principles of international cooperation in the field of engineering discussed so far, concerned the national aspect. The technical point of view is of no less importance. It is a consequence what has been said in section 1 that the first principle of international cooperation must be to guarantee the production of all kinds of modern machinery and equipment in the socialist countries. Moreover, cooperation is to be set up in a way which will make it possible to introduce in production new results of technical research and development activities within the shortest time. This, obviously, asks for the rational distribution of branches of engineering amount the CMEA-countries.

Technical progress is going on steadily. New technologies and new products will be developed. This is why new branches of machinery construction do emerge ceaselessly making international cooperation a constant process even in this main economic field.

Aside from these general considerations on international cooperation it has been agreed on some more detailed principles. The first is to pay special attention to the metallurgical basis. Generally, countries with a small metallurgical basis will concentrate their efforts on machinery with a low material intensity (Hungary and the GDR) while the other countries will give more emphasis to the production of heavy equipment (Poland, Czechoslovakia, USSR). This principle is, by the way, a complementary of the principle already mentioned in section 2.11 that mineral resources and raw materials should be processed, preferably, where they are available.

The main point in international cooperation of engineering is to keep up with technical progress fully. Practically,



modern production is impossible without adequate activities in the respective fields of research and development. Research, development and utilization of techniques and technologies form a unit, which asks for an according economic organisation and planning. New research and development operations do not concern, as matter of fact, only a single product but a whole group of products or a branch. This is true with special respect to new technologies. It is not regarded, therefore, appropriate to limit international cooperation in the field of engineering to single products or types of them. This method of international cooperation has been applied partially since the beginning of these activities in 1854/56. At that time planners were facing the problem to increase output of a large number of machines by means of national specialisation; and they were expected to manage it quickly. The only way to cope with this problem was to analyse the national data on output and demand of the selected products and to study the various possibilities of increasing output in the member-countries by both national and international measures. The starting point had been to increase output. The starting point now is to keep up with technical progress at any case as the basic precondition for an extension of output. This will be possible only on the basis of a specific classification of products with respect to their technical and technological conditions. International cooperation of single products only will be the exception but not the rule. It is envisaged to pursue a policy of international specialisation of so-called basic groups and basic types of products. By this way the respective countries will be in the position not only to establish a modern, rational and large-scale production but also to set up related to this specialised production technical



research and development institutions. Consequently, specialisation affects both research and productive activities. This combination is, without doubt, advantageous for the economic structure and development of the respective country. As a matter of fact scientific and training activities can be concentrated and, by means of this, be made more effective.

Another principle of specialisation engineering industries is closely related to that mentioned before. It is an empirical observation that imports of complete (complex) equipment (factories) are increasing, usually, at a higher rate than imports (exports) of single machinery units. This is consequence of modern technique and economy. The CMEA making use of this tendency agreed on the principle of national specialisation by complete equipment, too. This prevents, obviously, national economies from being developed on a narrow scale because the production of complex equipment asks for products coming from several branches.

The GDR, e.g., will be (and, as a matter of fact, already is) the main specialised producer of cement-making factories, medium sized bloomings, spinning mills, printing offices etc.

International resp. national specialisation in the field of engineering industries, whether broken down by basic groups of products, by complete equipment or even by single products, must be implemented in a way which will guarantee; principally:

- (i) satisfaction of total demand of the respective machinery.
- (ii) high technical level (quality) of the equipment and, finally.
- (iii) full supply of spare parts necessary for the exported equipment.



## 2.15 Consumer Goods

As far as durable consumer goods are concerned their production will be internationally specialised in case the local demand is below the limits of rational mass or large series production at a given technical level. If respective measures prove to be pressing special agreements are to be reached by the countries interested in the problem. Such agreements should generally aim at (i) a maximum satisfaction of demand; (ii) an increase of series under production and (iii) at an extension of foreign trade in this field with the view to diversify supply on the national markets concerned.

With respect to food the CMEA put forward a general principle that these branches are to be developed and specialised nationally in order to process at best completely local supply of agricultural products.

## 2.2. General aspects of international coordination.

If we are going to reach conclusions with respect to the general (national) - principles of international coordination we must refer to the two major economic factors discussed already in section 1. In order to make full use of the latest economic possibilities of up-to-date technique and technology the first general principle of international coordination has to be the maximum efficiency of this activity.

## 2.21 Maximum economic efficiency of international division of labour

It has been generally acknowledged that international coordination of national plans on the CMEA area has to result, finally, in a constantly high rate of growth which is the precondition for an increase in consumption as well as for a successive overcoming of the differences of the level of economic development in the CMEA-member-countries.



The increase of productivity which is basic to a high rate of growth is regarded, primarily, to be the main criterion of the expediency of any measure to be taken in the field of international coordination. Productivity, naturally, is conceived as a category of the national economy as a whole. Maximum efficiency, viz. maximum productivity, will be reached if expenditure of material, labour and transport are least from the national point of view. When calculating the effect on productivity one has to take into detailed account not only the cost of material, labour etc. with respect to one factory or branch. It is necessary to pay equal attention to the economic consequences on the national level in order to find the most rational solution and, simultaneously, to compare national calculations with those from the other member-countries of the CMEA. This is meant to find out the most rational way on the international scale. It is not difficult to understand that this method is more effective than mere national comparisons of variants and that, moreover, such international calculations will affect, finally, not only productivity but also the economic structure of the national economies concerned due to the fact that productivity (and its increase, of course, too) does depend upon (i) the level of technique and technology and upon (ii) the more or less rational organisation of production on the various levels (factory, branch, national economy, international level).

Calculations with the view to maximum productivity on the international level will take into consideration, at least, in each case the following factors:

- a) decrease of current costs of production and transport of products which are to be specialised;



- b) decrease of the specific investment requirements (capital output ratio) including the time factor and the period of repayment of investment expenditure;
- c) full employments (as a result of the national efficiency of foreign trade);
- e) specific role of the respective production with regard to national productivity;
- f) assimilation of the national levels of economic development;
- g) strengthening of the military power etc.

It goes without saying that this approach asks for an extensive cooperation in the field of scientific and technical activities involving joint research work and institutions, exchange of technical and technological documents and data, exchange of experience in the field of management and organisation of production etc.

## 2.22 International specialisation of production and complex development of national economies.

The concept of international coordination itself implies the existence of national economies which are subject to coordination. In section 1 it was given an explanation of the role the national economies of the CMEA-countries have to play, in general. Resulting from this the second general principle of international division of labour had been formulated as the combination of international specialisation of production on the one hand and the complex development of the national economies in all member-countries, on the other. Complex development of national economies is understood as the establishment of a multibranch structure representing a rational complex of industry and agriculture, primary commodities and processing



branches, investment goods and consumer goods production, and contributing to an acceleration of the rate of growth as well as to an improvement of the economic efficiency.

The CMEA realised that both national economic (planning) activities and international coordination of plans must contribute equally to a full utilization of all elements of the economic potential, i.e.: manpower, capacities, mineral deposits, international economic relations with all countries etc. It had been stressed that this maximum utilization will be reached only if national as well as international relations of the member-countries will be reconsidered with a view to establish a new and more rational economic structure on both levels.

This principle of harmonic combination of complex national development and international specialisation comprises the following aspects which are basic to national planning:

- a) productivity and economic efficiency must increase steadily. A maximum rate of growth of industry. Therefore, will be the basic precondition for national development.
- b) output of investment goods, consequently, will be given priority.
- c) maximum utilization of local mineral deposits and development of the respective branches (power, raw material, fuel) in order to meet national and international demand.
- d) accelerated growth of those branches which form the basis of technical progress (engineering and chemical industries).
- e) national development of construction material, light and food industries in order to process local sources and thus to satisfy a high percentage of national demand without imports.



- f) national development of a modern communication system.
- g) national development of agriculture with a view to meet most of the local demand of food, fodder and raw materials for the processing industries as well. This implies increase of the intensity of agricultural production and extension of cultivable land.
- h) full employment of the population in working age.
- i) accelerated industrial development of economically backward regions.
- j) full utilization of the advantages of international specialisation of production with socialist countries as well as of the possibilities of extending foreign trade with all other countries.

As far as the specialisation of production of those branches is concerned which will be developed in all CMEA-countries this will affect naturally, single products. In all cases of national specialisation and international coordination it is necessary, principally, to take into consideration both the demand of socialist countries and the possibilities for extending exports to other areas of the world.

## 2.23 Assimilation of the national levels of economic development.

The member-countries of the CMEA have reached, as a matter of fact, different stages with respect to their productive forces (skilled manpower, technical-equipment etc.). These differences come from different lines in the history of national economic development. As international cooperation in the CMEA area is meant to increase the economic efficiency even on the national level it is necessary to abolish such discrepancies. This proves to be an outstanding target of all national economic plans of the member-countries which



generally, can be characterized by the tendency of assimilation with regard to the following data:

- (i) per capita national income and per capita industrial output
- (ii) efficiency of agricultural production
- (iii) productivity
- (iv) consumption (main data).

This tendency actually does not imply the abolishment of differences which are caused by peculiarities of local mineral resources, climate and national traditions in the field of consumption or with respect to the national way of life in general.

The general principle of assimilating the levels of national development can be put into force only by accelerated rate of growth in the less developed CMEA-countries. This requires a series of practical steps to be undertaken by both well and less advanced member-countries. If we study this problem we come to the conclusion that the backward CMEA-countries have to envisage the following measures:

- a) maximum utilisation of national, mineral deposits
- b) relatively higher rate of accumulation
- c) permanent improvement of technical equipment
- d) increase of the rate of employment
- e) fast increase in productivity.

As the national development of the CMEA-countries is the concern of all member-countries the latter are expected to give an extensive aid to the less advanced countries. It had been stressed, already that international economic progress is mainly determined by the maximum economic progress on the national level. This is why the liquidation of the differences



in the stages of economic progress must be accomplished, primarily, by national efforts. But, simultaneously, international assistance is indispensable. In order to combine both aspects this international aid must, first and foremost, help the respective country to mobilise its own economic resources and to increase the national potential. International aid which, finally, would keep the backward country a backward one and which would have only a current effect and no lasting one cannot be regarded a real aid. Generally, international assistance must result in a diminishing dependence on further aid from abroad. It should be conceived not only as a mere addition to the national income of the respective country in the present planning period; real international aid must provide the economic possibilities of further own enlarged reproduction.

While this is true with respect to the countries which are receiving international help we must consider another aspect as regards the more advanced CMEA-countries. We already have learned that the rate of growth in less developed countries must be higher than in the other. It seems to be, after all, a matter of fact that this relation between the rates of growth in different countries must not be achieved by decrease of this rate in the advanced CMEA-countries. International aid which, really, contributes to economic progress in backward countries at the cost of the more advanced CMEA-countries is no real aid at all. This way would, without any doubt, result in a minor difference between the various levels of national economic development. But the average level on the CMEA area would be less. This would be in contradiction with respect to the general aim of the CMEA.



International cooperation and coordination must take full account of two criterions: both national and international progress.

In view of this the more advanced CMEA-countries are to take the following measures:

- a) information about recent results of scientific and technical research;
- b) participation in projecting technically up-to-date plants;
- c) assistance in the field of prospections for mineral deposits;
- d) training of manpower and experts;
- e) deliveries of industrial equipment with priority to be given to complex equipment;
- f) assistance in assembling and managing such equipment;
- g) credits and other forms of aid;

Even a superficial study of these measures reveals that international help by the more advanced CMEA-countries is such which will contribute to a more and more independent or self-sustaining economic potential in the less developed member-countries. It is the general intention of this principle of international cooperation that after a certain period of time all member-countries should dispose of a well balanced industrial potential based on a heavy industry and engineering branches on the one hand and of all accomplishments of modern science and technique on the other.



### 3. Methods of coordination

The principles of international cooperation discussed in section 2, are important instrument of national planning and of international coordination as well. They will enable planners to cope with the very complicated task of establishing a comprehensive (complex) national long-term plan covering 15-20 years which is to be balanced and coordinated, simultaneously, on the international level. The elaboration of such principles, of course, does not mean that the work of international coordination is already done. Actually, it had begun some time ago and is now in full swing. The principles mentioned will prove, without doubt, to be criterion for this work indicating its aims and direction. They will not make problems less complicated but soluble.

International cooperation with special emphasis on coordination of national plans asks for, at least, three prerequisites:

- (i) A basic idea of international economic cooperation common to and approved by all partners as a common scientific basis.
- (ii) National planning activities in strict conformity with this basic idea (principles).
- (iii) Joint international planning (coordinating) activities of the CMEA-member-countries. This implies, of course, the establishment of a system of international institutions in this field.

#### 3.1 The new approach in the field of international coordination

The scientific work on principles of international socialist division of labour marked a new period of international cooperation



among the member-countries of the CMEA. We must study, therefore, the characteristic new conditions which induced the planners of the concerned socialist countries to speak about a new period. It seems to be appropriate, too, to outline methods of coordination applied up till now on the CMEA area in order to understand properly what the new period of international cooperation is like thus indicating the different approach.

A thorough study of recent general accomplishments of economic political, social and cultural development in all CMEA-countries resulted in a picture differing from that in the starting stage of international cooperation. The main observations can be divided into two groups. First, the social structure of the a.m. countries had changed basically. In all member-countries a certain internal struggle had finally ceased which gave way to an unhampered further development of the predominant socialist sector in the national economy. There was no left no chance of a restoration of an capitalist economy. The most remarkable event in this field had been the rather total establishment of collective farming system in the CMEA area. It is no exaggeration to state that this meant the removal of the last social barrier to a further high rate of growth of productive resources and, consequently, of total output.

Secondly, as an outcome of the basic changes of the social structure must be regarded the new industrial character of the national economies (cf. section 1). concerned. With respect to this fact, to the formation of a series of entirely new branches in many countries and with respect to the significant increase of industrial production subject to planning



activities were not anymore simply kinds and quantities of production. The problem which now emerged was to plan by which way and by means of what (in the technical and technological sense of the word) the various kinds and great quantities of products should be produced. This tendency affects techniques (automation), technology (line production methods, combined machinery sets, prefabricated construction elements etc.) and new kinds of material (plastics, special sorts of steel, artificial fibres etc.) as well.

The CMEA-countries entering a new stage of social and economic-technical development had to look for improvements in the field of international cooperation and coordination of plans. The methods which have been in action up till now proved to be not appropriate with respect to the new situation. This is true with special reference to the problems of coordination of plans, of investment activities of technical development, of specialisation in the field of production and agriculture as well. The coordination of plans which had begun some years ago has not been based on a joint conception multilaterally approved. Coordination covered activities in only some important fields of economy, and basic to it have been national plans after they had been principally approved by the respective governments (cf. section 2.). Furthermore, coordination did not go, generally, beyond the five-years-plans' targets. This period of international coordination proved to be too short. It did not meet the requirements of drawing up and implementing e.g. an comprehensive investment plan, obviously, asks for a longer period if all procedural stages are taken into account: drawing up of the technical, technological and economic



conception of the project; decision on its location; reconsideration of the whole project with respect to the repercussions on the national economy; period of construction etc. Bearing in mind what has been said in section 1 we must conclude that it now had become difficult or even impossible to coordinate plans efficiently in full accordance with the main tendencies in technical and economic development in the long run. Coordination of investment activities faced great difficulties.

Agreements on international cooperation implying recommendations in the field of specialisation, were left to the governments for realisation within the coordination period (5 years) as a whole. They had not been complemented by arrangements on the one-year-basis. Annual plans, therefore, have not been subject to international coordination. Instant international aid and cooperation while the CMEA-agreements were in action in the annual plans, happened to be off the competence of the respective international bodies. International coordination of plans should, therefore, be extended to, first a period of 15-20 years and, secondly, to annual plans thus becoming an integral part of national planning activities in both the long and short run.

All these methods resulted in the fact that unnumerous agreements had been reached by the permanent commissions of the Council of Mutual Economic Aid which were useful as such. But their scope was too small in time and also with respect to the entire economic development. The effect of these international activities was a partial one. On the basis of international agreements in 1965 production e.g. of bloomings will be specialized by 80% of total output on the CMEA area. The respective figures for electric power equipment and roll bearings are 70 and 90% (Pravda, 30-8-62).



Useful as they have been, it became more and more apparent that they have not yet improved the profile (structure) of the respective national economies. This can be observed, too, as far as the problem of making national production more rational by means of international specialisation is concerned.

It was considered, therefore, by the conference of the Heads of State of the CMEA-countries, held in June 1962, a pressing problem to enter a new period of international co-operation and coordination, thus giving full way to the new economic and technical tendencies. The "Principles of International Socialist Division of Labour" approved by this conference are regarded the general basis and the starting point for practical measures in this field.

It we are trying to outline the new approach in the field of coordination of plans in the CMEA area we must be aware of the fact that this coordination is just under way and methods applied will be improved according to new experiences which will be gained in the next months and years of intensive international and national planning activities well.

The new approach consists of three elementary stages:

- (i) Elaboration of and decision on the general basic concept of international joint action of the CMEA countries (cf. section 1 and 2). This idea involves the transition to long-term coordination of plans covering a whole period of social development both on the national and international level as well as the coordination of the national economies as whole.
- (ii) If so, subject to international coordination must be, first and foremost, those economic activities and respective data which are decisive for the



structure and efficiency as well of the national economies concerned: investments.

- (iii) On the basis of agreements on investment activities in the long run, CMEA-countries will come to terms with each other in the related fields of:

specialisation of branches and products;  
scientific and technical cooperation  
(research, development, standardisation);  
foreign trade.

Although there is a distinct sequence of these three main stages of international activities in the field of co-ordination of plans, the respective detailed tasks of each stage will be executed almost simultaneously, i.e. work is starting at both ends with priority to be given, of course, to the general aims and principles, at any rate. This way is not only determined by mere practical requirements but even by the fact that the existence of general principles of international cooperation is a solid guarantee that detailed activities on particular and rather concrete problems will proceed in accordance with national and international aims of the CMEA-countries.<sup>1)</sup>

### 3.2 Determination of the specific role of each national economy in the new system of international economic relations

We have learned in section 2 about the combination of complex national development and international cooperation.

- 1) When discussing next various methods of international co-ordination and cooperation on the CMEA area it will not be stressed in each case that basic to it are the procedural regulations of the Statute of the CMEA (Memo. No. 194).



The latter has been described not to be a mere addition of equally structured national economies. These, on the contrary, are expected to contribute to the general progress of the socialist system within the limits of their respective resources, experience and tradition. By this way the economic potential will be, without doubt, utilized with maximum efficiency.

Principally, the decision on the special role a national economic has to play is based on two considerations: first which country actually has the best conditions in order to develop further a certain branch or a group of branches forming a certain economic complex with the view to put on them more stress than other member-countries are advised to do. These considerations imply analyses of natural conditions, capacities, technical level of equipment in use, raw material supply, manpower problems, costs of production and transport and the possibilities of decreasing them etc. Secondly, the same data are studied if the CMEA has in mind to settle the problem where to establish and develop new technologies or branches with respect to (i) guaranteeing a rational mass (or large-series) production, (ii) to a complex national development and (iii) meeting the demand on the respective productive products on the whole area.

The determination of the specific role of a national economy includes a thorough analysis of the problem if or not the suggested specialisation (on one branch or on a group of them) provides, simultaneously, the economic basis for a complex national development. At least, it should be avoided that any measure of international specialisation could hamper complexity on the national level. With a view to this we can



state that there are three cases, perhaps, where the specific international role seems to be already clear :

- a) The German Democratic Republic will concentrate efforts on production of machinery and equipment (chemical equipment, metal-forming machines, ships). She is able to increase rapidly output of such products as soon as international specialisation will come into force. Already now, one third of total machinery imports of all CMEA-countries are coming from the GDR.
- b) The USSR will remain the main exporting country of raw material and primary products. This so, because the USSR is very rich of rather all mineral deposits necessary for a modern industry. In addition to it, the high capital-intensity of these branches would absorb a too great share of the accumulation funds of the smaller socialist countries thus leading to a high tension in their economic proportions.
- c) Besides a considerable share in industry Bulgaria is supposed to emphasize production of fruits (wine etc.) and vegetables (tomatoes e.g.) as far as agriculture is concerned.

If the specific role of the respective national economies is to be determined in accordance with the complex development on the national level, the structure of each national economy must be reconsidered. Informations available show us that, at least, four of the CMEA-countries have already made up their minds as far as the measures are concerned which are to be taken with respect to an adjustment of the economic structure, i.e., GDR, Hungary, Czechoslovakia and Bulgaria. It is not appropriate,



however, to discuss these national problems in this paper. We shall give, therefore, only a list of these branches (in industry) which will be the nucleus of the structure of the national economies mentioned.

- (i) Hungary : Instruments  
Electronics  
Mechanical engineering
- (ii) Czechoslovakia : Metallurgy  
Engineering (equipment for automation)  
Fuel (coal)  
Power generation  
Chemical industry
- (iii) GDR : Highly processed chemical products  
Metallurgy (second-stage processes only)  
High-productive (qualified-labour intensive branches, e.g., :  
mechanical engineering, chemical equipment, electrotechnical engineering, equipment for agriculture, light and food industries,
- (iv) Bulgaria : Engineering  
(equipment for light industry and agriculture, electrotechnical products)  
Chemical industry  
Agriculture (fruits, vegetables, processing of agricultural products)



### 3.3 Coordination of investment policies

The accelerated growth of the key-branches asks for remarkable investment which, usually, must be allocated for big projects. National calculations, therefore, are made to find out which projects must necessarily be built to meet the national and foreign demand of the respective specialized products. These provisional calculations imply:

- ( i ) total investment (in value terms)
- (ii ) total capacity (in physical terms)
- (iii) extent of satisfaction of the given demand
- (iv ) effect on that part of the national income which is allocated for investment ( accumulation fund) in physical and value terms.

It is clear that these projects represent the "skeleton" of the national plans because they determine the structural changes of the respective national economy in accordance with the international agreements on specialization and cooperation. Their investment requirements should be met totally. But it will be thoroughly studied if or not these projects absorb too great a part of the investment fund thus limiting the possibility of further investment in other branches to an extent possibly unfavourable to a complex national development.

If so, concrete international negotiations will start. They are principally preceded by national studies in the possibility of an increase in the rate of accumulation. The German Democratic Republic, e.g. is proceeding this way. The results of this national analysis are the basis for international cooperation. According to the very nature of the respective investment



problem negotiations will be executed either bilaterally or multilaterally. This greatly depends upon the fact if several countries are interested in the output of the planned project or if the respective project affects only two partners. In either case, the same questions will be considered principally in the same way, namely:

- (i) ... which country will be able to deliver special equipment (or additional machinery) for the planned project. This may in case the respective engineering capacity in the investor-country is fully used or not able to expand output. These studies lead to an agreement on foreign trade and possibly also to recommendations concerning further specialisation of industrial output.
- (ii) Secondly, the necessity or possibility of establishing joint key-projects will be discussed. This is one form of direct international cooperation with several countries being involved each contributing to the international project by certain activities. In most cases, up till now, the investor countries have been in charge of the construction, while the other have been responsible for the supply and assembling of different kinds of equipment which fit in their respective production programmes. This method has been applied e.g. with respect to transleuroplan pipeline system and the reed precessing combinate in Roumania.

By this way, the agreements on international specialisation of production will be carried out with particular reference to a definite project. Supplies of complementing equipment for it are executed mainly on a credit basis. This credit will be repaid by exporting



part of the output of the joint key-project. Thus, joint international projects affect, first, the respective national rates of accumulation by increasing the investment fund physically, secondly the system of international specialisation of production both in the investor-countries and in the equipment supplying economies, and, thirdly, the structure as well as the volume of foreign trade.

- (iii) The third question concerns the technical, technological and construction documentation of industrial projects. There is a distinct tendency in all socialist countries to standardize not only products or technologies but also documentations of this kind.

This implies international exchange of documents which are not included in the foreign trade operations because no payments are to be made by the receiving country. This method is a rather old one as far as the exchange of particular documents is concerned. It has now been extended to whole projects. The projecting and designing capacities can be used, consequently, more rationally. Moreover, the receiving country can start the execution of the project immediately after exchange of the necessary documents. Usually, only some amendments must be made to the project documentation with respect to the local conditions. Anyway, no projecting work will be doubled and time be gained.

The next step in this field is to specialize on the international scale also the main projecting capacities (construction, testing units, laboratories, pilot establishments etc.) with a view to standardize projects in their main technical, technological and constructive parts.



(iv) Fourthly, credits can be given to countries which are in need of such. Credits may be granted in different forms, either by raw material etc. supplies or in hard currencies. But, practically, credits are no prevailing form of international cooperation. Credits in free currencies have been rather seldom. Credits, generally, may play a diminishing role at the extent of other forms of direct international becoming more developed. Up till now credits have been granted, preferably, to meet difficult situations in the initial phase of socialist development or in order to counteract certain economic and other policies of capitalist countries against socialist countries.

All these studies will lead to a reconsideration and redrafting of the national economic plans unless a balance is reached both nationally and internationally.

### 3.4 Coordination of production targets

Coordination of plans implies rather concrete activities with respect to single products. It has been mentioned that in this field many international agreements had been reached. This work, of course, will continue now within the framework of the general international specialization on the CMEA area. The method of coordination of output (in physical terms) itself is relatively simple so that it can be described with few words.

First, total output and total demand of the respective commodity is estimated, tentatively. This is done on the national level with due respect of the foreign trade agreements which are existing or will be signed with non-CMEA-countries.



Thus, a balance is worked out showing either surplus or deficit. Each member-country will submit its national balances to the CMEA indicating, simultaneously, from where it wishes to get deficits and which surplus of output it can offer to the other countries. Secondly, these national (material) balances are discussed by the respective Permanent Commission. Basic to this work is an international balance of each country which is to be prepared by the secretariate. The Permanent commission will try to reach full balance in accordance with a rational system of international division of labour as with complex national development. Finally, it will work out an international balance showing total sources (output and import) and uses (demand) on the whole CMEA area. This balance gives details with reference to, at least, the following items:

- (i) suggested total output of each national economy
- (ii) volumes, kinds, period and countries of mutual exports and imports.

This result will be the starting point for further detailed national planning in the field of production and, consequently, of investment. It is also a basis for either bi-or multilateral foreign trade negotiations and agreement.

Sometimes such calculations are exercised in a deeper way as far as the most important products are concerned. Thus, all CMEA-countries are engaged in an extensive study of total energetic resources on the whole area. This work goes beyond "simple" problems of coordination targets.

Any coordination of production will proceed in full accordance with the economic structure of each member-country (cf. section 3.2).



### 3.5 Coordination of technical and technological activities

There are two lines of coordinating work in the field of technique and technology. The first has been mentioned already as same kind of general principle. It may be formulated like this: He who is the main producer of a certain commodity will be responsible also for any related research, training and developing work in this field. This is rather a task in the long run which will be fulfilled at the extent the national structure of the economy is gradually altered according to the international agreements of the CMEA.

The second way of cooperation in this field is more actual already. In particular is it followed on enterprise or branch level in a rather direct manner. We shall refer to two examples of international cooperation and coordination in order to describe the character of this method.

First, there are undertaken multilateral studies concerning the most rational technologies as well as systems of organisation production in metal and steel works. This is to combine into a optimum technology etc. the best results and experience in different national metal-making branches. This method will not be limited to branches which are subject to international coordination of production. Such cooperation is executed by either groups of experts attached to the respective Permanent Commission or joint studies of several similar enterprises, directly.

Secondly, experiments are under way with respect to agricultural machinery. Under the auspices of the Permanent Commission for Agriculture different kinds of agricultural equipment are tested under various conditions (i.e. in different countries). It is intended to find out those which



suit best special conditions of either the respective culture or country or agricultural area (region). Although experiments of this kind have been undertaken many years they now cover whole (complex) machinery systems (e.g. harvesting machines for each crop, equipment for cattle feeding etc.). This had become necessary because the new prevailing collective farming system requires a higher level of mechanisation. The result will be twofold: technological (technical) and economic. As far as technical and technological aspects are concerned the following questions must be answered definitely:

- (i) which machines are most productive with respect to the different crops, agricultural activities and areas;
- (ii) which machines must be improved in order to meet all modern economic and technical requirements;
- (iii) which kinds of machines must be developed in order to complete or extend existing machinery systems;
- (iv) which machines and parts of them must be standardized internationally.

With respect to economic consequences the following problems must be solved:

- (i) total demand and
- (ii) total output of each machine,
- (iii) recommendations referring to which country should be the main producer of the respective machinery (or which machines should not be specialized internationally because they are used only in one country etc.).

All these experiments include also means of transportation and tractors as well.



### 3.6 Unification of planning methods

International coordination of national plans is a problem of methodology, too. The CMEA, therefore, started work in the field of planning methods some time ago. The first step has been, naturally, to unify the main methods used by the various national planning authorities as far as it became necessary with respect to international coordination. This activity was meant to make national data comparable from the mere statistical point of view.

Up till now such work has been undertaken in four fields:

- (i) calculation and balancing of the national income (the main point has been the different approach in estimating the accumulation fund and, consequently, the rate of accumulation);
- (ii) classification of branches;
- (iii) classification of commodities;
- (iv) calculation of the efficiency of investments;

It is without doubt, that the extensive work on international cooperation of national plans will soon ask for particular planning methods in this field which must be elaborated by both the Economic and statistical. Permanent Commission of the CMEA.



3.7 The institutional framework of international coordination of plans.<sup>1)</sup>

All general problems of international coordination are discussed either by the general assembly of the CMEA or the executive committee as well. To both institutions all member-countries are represented by deputy prime ministers who can make official statements on behalf of their countries and their agreement with recommendations of the CMEA will mean, usually, that the latter can be regarded as national governmental instructions which will be implemented anyway. The direct representation of all member-countries by deputy prime ministers is a guarantee that all national points of view, all agreement with and objections to the respective issue will be told to the Council, immediately, and taken into account. Any further delay in the implementation of the recommendations can be avoided because the CMEA has not to wait any longer until the respective governments will have declared their approval or non-approval.

To the recently (June 1962) established Executive committee a bureau had been attached which is composed of deputy chairmen of the National State Planning Commissions. This institution deals with problems of coordination of national economic plans.

In addition to this, all CMEA - countries agreed that submit conferences will be held at shorter intervalls to discuss important economic problems.

The concrete work of coordination is done by the Permanent Commissions of the Council of Mutual Economic Aid.

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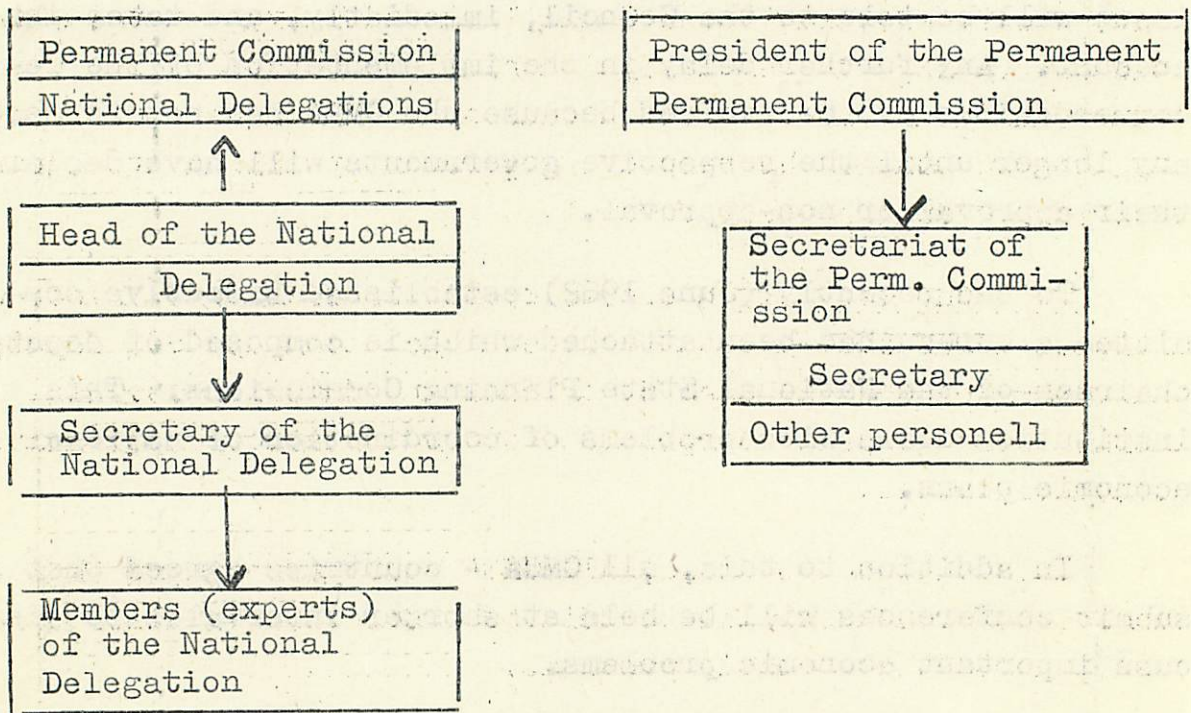
1) cf. Memo. No. 194.



They are responsible for the coordination of plans concerning their respective branches.

Each commission is composed of national delegations which, naturally, are appointed by the governments of the member-countries. Their personell must not be necessarily always the same. As a rule, the heads of national delegations remain the same over a long period so to have a certain continuity in work. But as their advisers are acting different experts in accordance with the respective items of the agenda of the sessions of the commissions.

The principle organisation of each Permanent Commission is the following:





The Permanent Commission convene at intervals fixed by themselves. The respective secretariats are responsible for current activities of the Commissions; they are in charge of:

- a) preparing the sessions of the commissions;
- b) fulfilling the tasks imposed on it by decision of the Commission or by the President of the Commission in accordance with these decisions;
- c) to prepare the program of work of the commission;
- d) to conduct, to coordinate and to control the activities of the various groups of experts established by the Commission according to its program of work or to decisions taken in addition to this program.

Each Permanent Commission (at present there are more than 15 existing) has its headquarter at the capital of one member-country. The president, as a rule, of each commission is the head of the national delegation of the country where the secretariat is residing. In order to vest the Permanent Commissions with high authority their presidents, usually, have the ranks of ministers or state secretaries (deputy ministers). The president of the Permanent Commission for Chemical Industry (Berlin), e.g., is vice-chairman and head of the department of chemical industry of the State Planning Commission of the GDR. The secretaries of the various Commissions are citizens of those countries where the respective headquarters are situated. The other personell of the secretariate is composed of citizens of all countries which are member of the Permanent Commissions. They are acting, of course, as international officials and not as national representatives. They are, consequently, not subordinated to or member of the national delegations.



As each Permanent Commission is responsible for a great complex of economic problems most of these commissions have several standing working groups and provisional groups of experts.

In addition to the work of the Permanent Commissions of the Council other institutions are engaged in international cooperation, too. They are working, exclusively, on a bilateral basis and can be divided into two groups:

- (i) bilateral commissions of scientific-technical cooperation and
- (ii) bilateral economic committees.

Commissions belonging to group (i) had been established more than ten years ago between almost all CMEA and other socialist countries. They are not part of the CMEA-system. The duties imposed on them are to organize and control exchange of technical data, experts etc. which the respective partners wish to obtain from each other. To discuss possibilities of mutual research in selected fields of science, technique and technology is believed to be within the competence of these committees, too.

Some socialist countries have formed bilateral economic committees (group (ii); e.g. Czechoslovakia-Poland; German Democratic Republic-Czechoslovakia; GDR-Bulgaria, when it had become necessary to contact each other in a closer way in the field of economic development. As a matter of fact, these committees started their activities already in the early fifties (or even before that period). They are similar to those of the CMEA-system to which, however, they do not belong.



They are active, of course, on a smaller scale but covering all fields or branches of economy both respective partner will consider to be included into their program of work. Generally, they execute recommendations of the CMEA as far as the respective two partners are concerned. In addition to this, they solve problems which are concerning only both partners and which, usually, are of no multilateral importance. Such are e.g., the specialisation of different kinds of consumer goods which had been decided by the joint Czechoslovakian-German Commission.



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