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# USSR Report

INTERNATIONAL ECONOMIC RELATIONS

(FOUO 2/80)



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USSR REPORT  
INTERNATIONAL ECONOMIC RELATIONS

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USSR-CEMA TRADE

INTERNATIONAL SPECIALIZATION OF PRODUCTION VIEWED

Moscow VOPROSY EKONOMIKI in Russian No 2, Feb 80 pp 89-96

[Article by Yu. Kormnov: "The Economic Effectiveness of International Production Specialization"]

[Text] The present stage of communist development--the stage of developed socialism--objectively requires successive improvement of the entire system for planning the organization of socialist social production. The CPSU Central Committee and USSR Council of Ministers decreed "On Improving Planning and Intensifying the Influence of the Economic Mechanism Upon Raising Production Effectiveness and Work Quality" was a practical embodiment of these requirements.

The measures contained within it account for the many years of our country's experience, for the achievements of Soviet economic science, and for the experience of other CEMA countries in this area. They also have their foreign economic aspect, and they require improvement of the methods for evaluating the effectiveness of economic measures, which are affecting more and more our state's foreign relations in production and economics, mainly with countries of the socialist fraternity.

Emphasis upon raising the effectiveness of social production is the most important part of the economic strategy assumed by the CPSU and fraternal parties of the CEMA countries. L. I. Brezhnev stressed at the November (1979) Plenum of the CPSU Central Committee that "we must implement the party's course toward greater effectiveness and quality with doubled and tripled energy. There are no alternatives to this course, and it must be followed unswervingly in the 11th Five-Year Plan."

The international mutual relationships among the national economies of the fraternal countries, which are growing stronger in the conditions of socialist economic integration, offer additional external sources for raising the effectiveness of production.

The practice of economic development and economic cooperation among socialist countries demonstrates the unity of the fundamental theoretical premises and

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The Ministry of Foreign Trade, its associations, and the sector ministries have been unable to rely on corrected outlays in their current work, inasmuch as they maintain accounts with the state budget on the basis of actual prices, and not the estimated prices.

The general opinion boiled down to using not the corrected outlays but the wholesale prices in the effectiveness estimates of actual production, the latter being precisely the indicator that dominates in the ties of international specialization; this would thus make the planned impact closer to the actual khozraschet impact, and afford a possibility for its accounting and control. This idea was laid at the basis of the "Interim Methodological Directives for Computing the Economic Effectiveness of Specialization and Cooperation of Production With CEMA Countries," which went into use in our country beginning in 1973. This document recommended the following formula for estimating the annual impact from international specialization of production:

$$\mathcal{E}_r = \sum \mathcal{E}_{ni} \Pi_{ni} - \sum \mathcal{E}_{oj} \Pi_{oj} + K (\sum B_{oj} \Pi_{oj} - \sum B_{ni} \Pi_{ni}) + \mathcal{E}_{к.п.}, \quad (1)$$

where  $\mathcal{E}_r$ --annual economic impact enjoyed by the USSR in relation to the examined variant of production specialization;  $\mathcal{E}_{ni}$ --national economic outlays per unit "i" of specialized imported product;  $\Pi_{ni}$ --annual volume of specialized products acquired by importation;  $\mathcal{E}_{oj}$ --national economic outlays per unit "j" of specialized export product;  $K$ --correction factor for the foreign trade exchange balance pertaining to the given agreement;  $B_{oj}$ --foreign trade price of a unit "j" of specialized export product;  $B_{ni}$ --foreign trade price of a unit "i" of a specialized import product;  $\mathcal{E}_{к.п.}$ --impact from production concentration arising in connection with production specialization.

Here is a concrete example of using this formula:

Export Article A

1. Wholesale price per unit (rubles)	2,300
2. Price surcharge for export modification (rubles)	700
3. Transportation outlays (rubles)	200
4. Outlays of the foreign trade organizations (rubles)	100
5. Total national economic outlays (rubles) (1 + 2 + 3 + 4)	300
6. Foreign trade price free to border	4,500
7. Annual delivery volume (units)	200
8. National economic outlays on the total export volume (thousands of rubles) (5 x 7)	660
9. Export volume in foreign trade prices (thousands of conversion rubles) (6 x 7)	900

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## Import Article B

1. Wholesale price per unit (rubles)	2,500
2. Transportation outlays (rubles)	200
3. Outlays of the foreign trade organizations (rubles)	100
4. Total national economic outlays (rubles) (1-2-3)	2,200
5. Foreign trade price free to border (conversion rubles)	4,400
6. Annual delivery volume (units)	150
7. National economic outlays on the total import volume (thousands of rubles) (4 x 6)	330
8. Import volume in foreign trade prices (thousands of conversion rubles) (5 x 6)	660

Let us assume further that  $K=1.2$ , and that the impact from production concentration, elicited by expansion of production on the basis of international specialization, came to 80,000 rubles. Then the total annual impact of export-import product exchange, computed with formula (1), would be:

$$S_r = 330 - 660 + 1,2 (900 - 660) + 80 = 38,000 \text{ rubles}$$

The import product prices used in computations based on this formula may be determined in different ways. The wholesale prices of domestic analogs are used in relation to articles with technical-economic characteristics corresponding to standards effective in the USSR. If the characteristics of import and domestic products differ, then the prices of domestic analogs are applied to the import product with the appropriate correction. If the import articles do not have analogs in domestic production, then the prices are determined by correcting the foreign trade price with an export effectiveness coefficient.

As we know, prices perform more than an accounting and measuring role. They reflect the usefulness, the consumer qualities of a product. It would be suitable to consider all of this in effectiveness estimates when we are dealing with economic measures associated with foreign economic ties. Of course it would be incorrect to make a fetish of wholesale prices as the best among the cost measures to be used in computations of the effectiveness of international specialization. This is why the method foresees correction of the wholesale prices if the profitability they insure differs from that set by the standards. Moreover interim prices must be replaced by permanent prices.

Application of the "Interim Methodological Directives..." as a state economic standard revealed, in a number of cases, disadvantages in presently existing and planned specialization, and made it possible to eliminate these disadvantages.

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practical means for raising the effectiveness of social production within CEMA countries, and of the economic ties among them, mainly along the lines of international specialization and cooperation of production.

Effectiveness estimates are made in the USSR in association with economic substantiation of draft proposals, recommendations, and treaties on international specialization and cooperation of production, during joint construction of facilities, and in the analysis, evaluation, and surveillance of the actual effectiveness of cooperation. A mandatory prerequisite for this is compliance with the priority of the national economic approach, and consideration of the economic interests of ministries and business (industrial and foreign trade) organizations.

In most cases the different comparable variants of satisfying the USSR economy's need for importing particular articles on the basis of international specialization of production may be set off in the USSR by a more or less realistic alternative--satisfying these same production needs with newly organized domestic production. However, it would be incorrect to interpret such potentials as absolute, even in Soviet industry. The Soviet Union does not possess certain machine building and other production operations. Organizing them at a modern technical level and within the desired time period would be unfeasible in a number of cases, and simply impossible in others. What we need to consider here is the shortage or absence of output capacities, the unpreparedness of logistical support, the shortage of capital investments, money, or manpower, inadequate scientific-technical foundations in the given area, and so on. This pertains even more to other socialist countries typified by relatively small population, territory, and industrial potential. To them, the alternative of setting up domestic production of all goods the world can produce would be unrealistic.

We began estimating the effectiveness of international specialization of production in our country in 1968-1972 on the basis of corrected outlays. The experience of these years demonstrated the difficulties of acquiring practical information with which to compute corrected outlays for the hundreds of articles covered by treaties of international specialization. Moreover these computations were not associated with the financial results of the khozraschet activities of production enterprises and foreign trade, as defined by wholesale prices. A discrepancy took form between the effectiveness estimates made in the planning stage and the actual effectiveness witnessed during implementation of agreements for production specialization.

I should state that the results of projected estimates of the effectiveness of different variants of international specialization, made from national economic positions, do not have a direct influence on the producing enterprises. The financial results of their activities are determined from the difference between domestic wholesale prices, to which surcharges have been added to cover the additional outlays associated with modifying products for export, and production costs. Nor are they aware of the foreign trade prices, inasmuch as foreign trade associations handle accounts with foreign partners.



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Meanwhile the foreign economic conditions underwent change. Prices in the world market began to grow sharply starting in 1974. The CEMA countries were forced to convert to a sliding scale of contract prices in mutual trade--that is, to setting these prices annually as an average of the 5 previous years. This made it more difficult to determine, for concrete articles, the foreign trade prices to be used in estimates of specialization effectiveness, and it made it necessary to improve the forecasts of such prices reported by subdivisions of the Ministry of Foreign Trade and organizations subordinated to it to the sector ministries.

Being a national standard-setting document, the "Directives..." include within themselves the sum total of requirements and information pertaining to all of the different committees, departments, ministries, and business organizations. Such is the unique nature of a national, comprehensive approach. As A. N. Kosygin emphasized at the 25th CPSU Congress, not only the central planning and foreign trade organizations of our country but also all other ministries and departments are obligated to guide themselves by the criteria of national economic effectiveness in resolving their foreign economic problems.

Of course a national approach must also account for the interests of the ministries, departments, associations, and enterprises. On this basis I will attempt to suggest a number of new methodological premises. In essence, they are: First, achieve compatibility in the methods used to determine the effectiveness of the USSR's planned and actual participation in international specialization of production together with other fraternal countries; second, compute the impact at different levels and from different positions: national (1), producers of export products (2), consumers of import products (3), foreign trade associations--the immediate exporters and importers of products (4) on the basis of agreements on international specialization.

Assessments of effectiveness at each of these levels may produce ambiguous and even contradictory results. By simply revealing this and clarifying the causes of the discrepancies, we could take steps to eliminate them from the priority positions of national interest. We can also continue to make general evaluations of the impact from national economic positions using formula (1).

Inasmuch as all specialization of production, including international, would be unimaginable apart from concrete producing enterprises, the effectiveness estimate must also be made at this level. From a practical standpoint we can reduce this to simply establishing the profit enjoyed from the production of export products and their sale by foreign trade associations using the following formula:

$$\mathcal{E}_{\text{прома}} = (U_0 - C_0) \Pi_0, \quad (2)$$

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where  $\Sigma \Pi_{0i}$ --total profit;  $\Pi_0$ --price of products transferred by the industrial enterprise to the foreign trade association, together with surcharges for modification of the products for export;  $C_0$ --cost of manufacturing the same product;  $\Pi_0$ --volume of products delivered for export. If in this case specialization has the influence of reducing the cost of products sold in the domestic market, this impact should also be accounted for.

Some economists feel that only the excess above the enterprise's average profitability should be considered in the impact from international specialization--that is, they suggest using the following formula:

$$\mathcal{P}_0 = \Sigma [\Pi_0 - (C_0 + E_n K_0)] \Pi_0. \quad (3)$$

As we can see (in the brackets), the impact is represented here as the difference between the price and the cost, reduced by the amount of the second factor of corrected outlays. To put it more briefly, if the country is to participate in international specialization, the profit would have to be larger than what could be obtained within its own national economy. In my opinion this is not right. Socialist economic integration must not produce a situation where a specialized article is obtained from a socialist partner for more than the cost of manufacturing the same article domestically. Therefore we need not add any other factors to our computation of the impact of specialization at the enterprise level in order to understand the economic interests the enterprise might have in its inclusion in international specialization. Use of this formula would in fact always lead to a negative impact.

Let us now try to evaluate the impact of productive use, within the national economy, of import products delivered on the basis of international specialization in the production of finished articles. Another thing we can do here is, naturally, compare the impact at the national economic level. Hundreds and thousands of enterprises are the users of particular machines. They use the equipment to different degrees (there are differences in intensity of use, amount of use per shift, and whole days of work per year), and they produce products with differing profitability. In view of this the impact of using the same machine (equipment) varies at different enterprises. It is impossible and, moreover, unnecessary to reveal this impact with a bookkeeper's accuracy and then sum up the impact on a countrywide scale.

We would have to limit ourselves to establishing an estimate of the impact enjoyed by the country as a whole from using the import product delivered in accordance with international specialization, in comparison with a domestic product, and from the position of the khozraschet interests of the importing ministries, for example the Ministry of Chemical Industry if we are talking about agreements for specialization in chemical machine building. In the eyes of these ministries, this impact would as a minimum take the form of lower depreciation deductions and capital payments per unit of product. Moreover the impact may assume numerous other concrete manifestations depending on the sphere of application of the given piece of equipment.

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Finally, we can approach an assessment of the "foreign trade" part of the impact of international specialization, which takes the form of the difference between wholesale and foreign trade prices (corrected to the units in which wholesale prices are expressed) on exported and imported articles.

This impact would be defined as follows in relation to importation of a specialized product:

$$\mathcal{I}_{\text{ИТ}} = \sum U_{\text{И}} \cdot e \cdot \Pi_{\text{И}} - \sum U_{\text{ИЧХ}} \cdot \Pi_{\text{И}}, \quad (4)$$

where  $U_{\text{И}}$ --outlays of the foreign trade association (the import price in conversion rubles per unit product; surcharges and commissions);  $e$ --ruble conversion factor;  $\Pi_{\text{И}}$ --quantity of imported product;  $U_{\text{ИЧХ}}$ --import price to the national economy (rubles).

The first factor of this formula describes the outlays of foreign trade associations in relation to importation of the specialized product, and the second represents the gain from its sale to Soviet consumers.

The following formula may be used to compute this impact in relation to exportation of a specialized product:

$$\mathcal{I}_{\text{ЭТ}} = \sum U_{\text{Э}} \cdot e \cdot \Pi_{\text{Э}} - \sum U_{\text{ОН}} \cdot \Pi_{\text{Э}}, \quad (5)$$

where  $U_{\text{Э}}$ --the export price obtained, in conversion rubles, per unit product, minus the surcharges and commissions of the foreign trade associations;  $U_{\text{ОН}}$ --wholesale price at which the product would be acquired in Soviet enterprises;  $\Pi_{\text{Э}}$ --quantity of exported product.

The Ministry of Foreign Trade (the appropriate administrations and foreign trade associations) possesses all of the information it needs to compute the foreign trade impact using these formulas; it is capable of evaluating the actual impact in a previous period, and a planned impact, though with price information that is of lower reliability due to the difficulties of forecasting foreign trade prices, considering their growth in the world market. A positive result from formula (5) would mean that foreign trade organizations have managed to preserve or increase the impact created within the production sphere, while a positive result from formula (4) would mean that they acquired the product at greater expense than it would have cost to manufacture it in the country. The total impact of the country's participation in international specialization would be defined as the sum of the impacts enjoyed by the producing enterprises, the consumers, and the foreign trade organizations.

The advantages of the "itemized" method of effectiveness computation at four levels (national, the production enterprise, the sector ministry, and the foreign trade organization) are that it permits us to reveal the unit within

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which the impact is created or lost, to eliminate anonymity, and reveal reserves. If one unit produces a benefit and another causes a loss, we could establish that industry and foreign trade have different degrees of interest in the given variant of specialization, and we could plan out practical corrective actions. If in the course of implementing an agreement of international specialization the producer experiences a loss, after analyzing its causes, if the conditions warrant we could increase the surcharge for modification of the product for export. This would be suitable whenever the impact from foreign trade is concurrently unjustifiably high.

On the other hand when the producer enjoys a relatively high benefit and foreign trade simultaneously suffers a "loss," we could raise the issue of reducing the price at which the foreign trade association acquires the product. If this turns out to be not enough, then we would have to make allocations from the budget. In a small number of cases such subsidization does in fact occur. But it is concealed, anonymous, "dissolved" within the overall result of foreign trade activity. A less-than-desired impact from trade, for example, of machines would be covered in the end in the foreign trade balance as a whole by the gain from selling, for example, consumer goods in the domestic market. In my opinion it would be much better for national control of the impact from international specialization to witness the concrete result of cooperation in every sector ministry and in every large production association, as well in relation to every agreement on production specialization, and to focus the attention of the appropriate state organs on this, so that they might take the necessary steps promptly to insure control, through the ruble, of khozraschet activities in not only the domestic but also the foreign economic sphere.

The use of factor "e" to convert from conversion rubles into Soviet rubles is especially important. In our country it has been assumed close to unity for a period of many years. It is difficult to agree that this is sensible. The fact is that contracted prices on goods involved in mutual deliveries among CEMA countries, expressed in conversion rubles, have been growing (though to a lesser degree than world prices) on the background of stable wholesale prices in our country for more than 10 years. Use of factor "e" in computations of the economic effectiveness of international specialization without considering these circumstances may lead to errors in the results, and in the conclusions deduced from them.

Exercising a monopoly in foreign economic ties, the state regulates, through planning, the volumes and geographic orientations of export-import ties, to include those involving production specialization. Conversion factors have become a powerful economic regulator in CEMA countries, through which the state implements its foreign economic policy. These factors are differentiated in relation to the countries to which goods are exported and from which goods are imported, and in relation to currencies; they change in time with a consideration for the foreign market conditions. It stands to reason that this in no way diminishes the dominant significance of direct planning assignments involving exportation and importation of a concrete assortment

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of articles. Experience of this sort should be considered in our country as well, though naturally with a consideration for the unique features of our national economic complex, and of the national economic planning and control system. I feel that as a minimum we must change this factor such that it would compensate for the discrepancy in the contracted and domestic wholesale prices set for particular groups of articles. From my point of view there are grounds for differentiating these factors in relation to different ministries as well.

Assuming the road of international specialization of its production, every country tries not only to reduce its outlays but also to obtain a sufficiently high foreign trade price. While the former depends mainly or entirely on the particular country and its economic organizations, the latter depends on other countries, the partners in specialization. They also want to purchase products cheaper and sell them dearer. This natural "incompatibility" of the positions of nationally independent concrete socialist merchants and customers must be kept in mind as a reality, so as not to enter into fruitless elusions and methodological abstractions. We must consider the existing differences in the national economies of the socialist countries at the present stage, the levels of their economic development, their labor productivity, the standard of living, presence of national currencies and pricing systems specific to each country, and the unique features of economic estimation and accounting.

The different variants of international specialization may be optimized only if we consider the realities mentioned above, and if we orient ourselves at creating enterprises and production operations producing specialized products optimum to the fraternity of CECA countries as a whole and satisfying the requirements of scientific-technical progress, ones that raise labor productivity in each of the fraternal countries; all of this must be examined from the standpoint of not only the internal conditions of the given country but also the highest levels achieved by the enterprises leading the world in relation to the concrete production operation.

The problem of evaluating the economic effectiveness of international socialist specialization of production cannot be reduced to just establishing the impact enjoyed by each country alone, independently of the interests of and the benefits enjoyed by the partner countries in the fraternity.

We cannot limit our considerations to just receiving as much income as possible for ourselves, especially due to the difference in foreign trade prices, rather than primarily through mutually coordinated mobilization of the reserves of effectiveness contained within production itself. I am fully in agreement with O. Rybakov's opinion that development of socialist economic integration and implementation of long-range specific programs of cooperation require development and practical introduction of methods for evaluating the effectiveness of such integration from the standpoint the interests of not only the individual countries but also the CECA fraternity as a whole, or in

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any case from the positions of the countries interested in the given concrete variant of international specialization.\*

We could enjoy decisive victories over capitalism in scientific-technical progress by acting together, rather than apart; our cooperation must begin with resolving issues associated with production and production processes, and it must end with enjoyment of a benefit by all interested countries. The collective nature of socialism is one of its main advantages, and it must be capitalized upon to the fullest extent in mutual foreign economic ties.

Computing the effectiveness of different variants of cooperation from different positions is not just within the realm of theoretical explorations; it has to do with the immediate future. In some forms of cooperation it is already a present, concrete task. As an example we become directly involved with it in scientific-technical cooperation based on agreements signed by international scientific-technical organizations, or in the case of production cooperation taking the forms of joint construction and joint operation of enterprises. In these forms, the cost parameters describing outlays and the impact of cooperation are obvious to all partners, and they are determined, accounted for, and distributed jointly.

Effectiveness assessments made from the positions of common interests may suggest possible directions of change in the scheme of division and cooperation of labor among the socialist countries, and the steps that we would need to take to alter intersector ties within countries and among them and to multilaterally redistribute the benefits directly affecting the economic interests of the partners. I should note that the methods of evaluating the economic effectiveness of international production specialization from the standpoint of common interests of the countries were developed back in 1967.\*\* These methods required the use of criteria of maximization of impact or minimization of outlays.

It may be asserted, however, that such estimates have not been made many times by CEMA organs developing the variants of international production specialization; they did not do so for a number of reasons involving difficulties in exchange of comparable information, the methods for recomputing outlays and impacts on the basis of identical cost yardsticks, and so on.

These real difficulties in seeking out the variants of international specialization beneficial to all member countries and optimum in relation to modern world standards from the standpoint of technical progress and concentration of production are surmountable from my point of view. In the end, the main thing for all CEMA countries to do is to organize new production

\* See Rybakov, O., "The Effectiveness of the USSR's Participation in Socialist Economic Integration" (PLANOVOYE KHOZYAYSTVO, No 1, 1979, p 25).

\*\* These methods were documented in the "Methods for Determining the Economic Effectiveness of Capital Investments by CEMA Countries," approved by the CEMA Permanent Commission for Economic Problems.

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operations or reconstruct existing ones on the basis of international specialization in a way which would in fact accelerate scientific-technical progress in all of its diverse manifestations and promote intensification of effective production concentration. The issue of spreading the impacts among the countries would in this case drop to secondary importance as predominantly a commercial question, a derivative of that which would occur in the production sphere itself in relation to production quality and outlays, since without the latter the overall impact would not increase at all.

This is why it is more important to direct the common efforts of the fraternal countries at accelerating scientific-technical progress--not at any price, but at the lowest price possible. World practice has a reliable qualitative criterion by which to judge such progress, namely the volume of specialized production that is optimum from the technical-economic standpoint and which is typical of the world's progressive firms, ones which lead the world market in relation to the particular product, mainly in terms of its quality.

Within the CEMA framework this criterion transforms into the principle of concentration of the production of the same kind of product within the lowest possible number of countries. It is assumed in this case that production would be simultaneously concentrated at a smaller number of plants as well. But unfortunately such proposals do not always reflect the realities. Specialization of a country in theoretical and practical respects, at least in application to machine building, is becoming a not entirely correct concept, if it does not simultaneously imply specialization of a concrete enterprise. Rather than raising the effectiveness of production and the technical level of the product, "specialized countries" not possessing specialized enterprises outfitted with modern equipment and using the most sophisticated processes would experience a growth in production outlays, a drop in the product's market competitiveness, and a decrease in the rate of scientific-technical progress.

Naturally the outlays to produce the same product may vary at enterprises in different CEMA countries that are identical from the technical standpoint. However, it would be proper to ignore these differences, since they are only generated by transitory factors, for example by differences in the skill levels of the workers, which are being eliminated as socialist integration progresses, as the fraternal countries come closer economically, and as the levels of industrial development level out on the basis of introduction of the most sophisticated equipment, production processes, and production organization practices.

From my point of view the approach from the positions of the common interests of the socialist countries to selection of effective variants of international specialization is an approach from the positions of technical progress at concrete production facilities. This is the concept decisions of the 23d CEMA Session require us to accept. Hence follows the need for making certain changes in the essence and order of international specialization

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and cooperation of production within the CEMA framework, on the basis of international economic organizations, and on a bilateral basis. In my opinion we must raise development of the variants of specialization and cooperation to that of concrete production associations, going beyond the country level. Life itself, examples of the effective work of truly specialized plants operating within the CEMA framework in a number of countries, and concentration of the attention of the countries in recent years upon concrete integrated facilities--plants, mines, combines, pipelines, and so on--confirm the validity of this idea. Successive implementation of this idea would make it possible to concentrate attention upon concrete measures affecting production directly, upon concrete plants, with the purpose of improving organization and raising the economic effectiveness of production. This will be helped along by completion of the tasks posed by the 22d and 23d CEMA sessions, which require CEMA organs and international economic organizations to interact mainly in the production sphere, to implement long-range specific programs of cooperation, and to accelerate scientific-technical progress in the fraternal countries, capitalizing upon the advantages of international socialist specialization and cooperation.

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USSR-CEMA TRADE

BILATERAL TRADE, VARIOUS ASPECTS OF CEMA COOPERATION

USSR-GDR Trade Discussed

Moscow VOPROSY EKONOMIKI in Russian No 1, 1980 pp 90-96

[Article by G. Mittag, Politburo Member, Secretary of the CC of the Socialist Unity Party of Germany, GDR: "The Development of the Economy of the GDR and the Deepening of Cooperation with the USSR"]

[Text] The German Democratic Republic is confidently moving along the path of the construction of a developed socialist society which was mapped out by the decisions of the Ninth Congress of the SEDG. The GDR is an inseparable component part of the socialist commonwealth and its fraternal alliance with the USSR is indestructible. This became especially manifest during the celebration of the 30th anniversary of the GDR. The anniversary of our republic took place under the sign of a visit to the GDR by a Soviet party and government delegation and acquired a truly world significance in connection with the remarkable speech that was given by the head of the delegation, the General Secretary of the CC CPSU and Chairman of the Presidium of the USSR Supreme Soviet, Comrade Leonid Il'ych Brezhnev at a festive meeting in the capital of the GDR -- Berlin. It can be said with every right that the national holiday of the GDR developed into a mighty demonstration of the indestructible friendship and solid fighting alliance between the Socialist Unity Party of Germany and the Communist Party of the Soviet Union, between our states and peoples.

During the visit by the Soviet party and government delegation a Program of Production Specialization and Cooperation between the GDR and USSR Until 1990 was signed. Without exaggeration it can be said that this document from the point of view of its principle points which provide for a unification of efforts in the name of a comprehensive strengthening of real socialism has already acquired historical importance.

In his speech the General Secretary of the CC of the SED and Chairman of the State Council of the GDR Comrade E. Honecker clearly defined the place of our country in the world revolutionary movement. "Thirty years of the German Democratic Republic," he said, "represent thirty years of

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struggle for peace and socialism and a convincing proof of the victorious march of the ideas of Marxism-Leninism. The very fact of the existence of our republic in the homeland of Karl Marx and Frederick Engels and of its inseparable connection with the great commonwealth of socialist states clearly demonstrates that we live in the kind of era in which an ever increasing number of peoples are selecting the socialist path of development."<sup>1</sup>

And we are very happy about the words of L. I. Brezhnev to the effect that our socialist state -- the GDR -- has been able to cope with its historical responsibility. "For my part, I want to emphasize," L. I. Brezhnev said, "that in the Communists of the German Democratic Republic and in the people of the GDR we have seen and continue to see reliable comrades-in-arms in our common cause who are faithful to our common great ideals, persistent and skillful in labor, and steadfast in the face of any trials."<sup>2</sup> The content of the policies of the SED and its everyday work are aimed at always justifying this evaluation. Faithful to the behests of Ernst Talmann, the SED looks upon a constant deepening of the fraternal alliance with the Leninist Communist Party of the Soviet Union as the highest requirement of its entire policy.

The great gains of the fraternal Soviet people in the construction of socialism and communism give rise to feelings of deep sympathy and delight in the people of the GDR. By successfully implementing the decisions of the 25th CPSU Congress the Soviet people is to a decisive extent helping to strengthen real socialism in its favorable influence on the course of the development in the entire world. The consistently internationalist policy of the CPSU is playing an outstanding role in ensuring peace and strengthening the commonwealth of socialist states and in fostering the achievement of new successes in the struggle of peoples for their national and social liberation.

The GDR has arrived at its 30th anniversary with enormous successes in the development of its economy and culture. It looks with optimism to the future. The successes of the GDR are a result of the fact that after the defeat of Hitlerite fascism by the glorious Soviet Army, the working class and its allies, under the leadership of the SED, and making use of the historically developed situation, eliminated the old political and economic relationships of imperialism, established the political power of the working class, and, in this way, opened the way to a new, socialist society. With this a radical turn in the history of the German people was realized. The development of socialism in the GDR has been and is being accompanied by a constant strengthening of its economic might. From the very beginning the chief precondition for this has been the development of a socialist planned economy which has

1. PRAVDA, 7 October 1979

2. Ibid.

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made it possible to direct material and spiritual forces toward the achievement of a single goal, to ensure a recession-free continuous growth of the economy, and to constantly increase the economic potential of the country in the interests of its workers.

As a result, a strong and powerful industrialized socialist state with a developed agriculture has arisen in the center of Europe on the borders of imperialist states. Over a period of three decades the national income of the GDR has increased from 22.4 billion marks in 1949 to 161.1 billion marks in 1978. That is, by more than 7 times. Capital investments during this period increased, respectively, from 2.8 billion marks to 50.8 billion marks or by 17.5 times. In 1949, 29,800 apartments were built, and in 1978, 167,800, that is, 5.6 times more. In addition, the quality of housing and its outfitting with modern conveniences have improved beyond measure. Retail commodity turnover increased from 13.8 billion marks in 1949 to 92.5 billion marks in 1978.

Socialist industry has and continues to play a decisive role in the strengthening of the economic might of the country. It has developed quantitatively, and has changed and is changing its structure. In place of the deformed industry which resulted from the war and the schismatic policy of the western powers, a modern, comprehensively developed, and powerful socialist industry has grown up on the territory of the GDR. Compared with the prewar level of the entire industry of the former German Reich, the production levels on the territory of the GDR in 1949 were 2.9 percent for hard coal, 1.6 percent for iron, 7.6 -- for raw steel, 5.0 -- for forgings and pressed products, 8.0 -- for lead, 6.0 -- for tin, 15 -- reducers and roller bearings, 11 -- electric motors (more than 15 kilowatts), 17 -- cement, and 10 percent for window glass. The only minerals which exist in sufficient amounts in the GDR are brown coal and potassium.

As a result of this, substantial efforts were needed to create a balanced multi-branch industrial structure. A number of branches of industry have developed at especially rapid rates. For example, compared to 1950 the production of electrical engineering and electronics had increased in 1978 by 22 times, machine building and transportation equipment -- 11.7 times, the chemical industry -- 10.9 times, and metallurgy -- 9.4 times. New branches of industry which produce products that were not produced in the GDR in 1950 have arisen. They include, in particular, the production of plastics, synthetic resins and fibers, transistors, television sets, maritime ships, combines, machine tools with digital programmed controls, and round-weaving knitting machines. As a whole, industrial production in 1978 had increased compared to 1950 by 8.4 times, and the proportion of industry in the national income produced in the GDR came to 60.4 percent compared to 42.2 percent in 1949.

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The establishment and strengthening of the economy of the GDR is inseparably bound up with its constantly deepening and comprehensive cooperation with the USSR. This can be expressed even more clearly: the strengthening of the economic might of the GDR on the basis of its own efforts is the result of the constantly deepening cooperation between the GDR and the USSR. This is a logical consequence of the common social principles, single ideology, and genuinely internationalist relations of our countries.

The USSR has been and continues to be the largest and most important foreign trade partner of the GDR. In actual prices foreign trade between the GDR and the USSR increased from 215 million rubles in 1949 to 7.7 billion rubles in 1978. The USSR's share in the total foreign trade turnover of the GDR exceeds one-third. In its turn, the GDR's share in Soviet exports comes to 12 percent, and in imports to 10 percent. Our republic is a major foreign trade partner of the USSR.

The development of trade relations between the GDR and the USSR is characterized by great dynamism, especially in the period after the 8th Congress of the SED which took place in 1971. During the years 1970-1978 mutual commodity exchange increased by 2.3 times, and its absolute increase came to around 4.2 billion rubles, which is approximately equal to the total turnover between the GDR and the USSR in 1974.

A further intensive development of commodity exchange is taking place on the basis of the high level of economic and scientific and technical relations which has been reached. During the last two years alone (1977-1978) commodity exchange between our countries came to 14.4 billion rubles, which exceeds the commodity exchange during the five-year period 1966-1970.

The dynamic development of economic and scientific and technical relations between the GDR and the USSR is being accompanied by qualitative changes in their structures. The large Soviet deliveries of fuel, mineral raw materials, and metals are of great importance for the GDR. They provide decisive help in meeting the growing needs of GDR industrial production for raw materials. High development rates are characteristic for the exchange of machine building and electronics output which is especially important for the intensification and rationalization of the production of both countries. During the years 1976-1979 alone the proportion of the products of the metal-working industry in total GDR exports to the USSR increased from 63.6 to 71 percent.

With its exports the GDR is making a contribution to supply Soviet enterprises with modern equipment, including microelectronics, to a rich assortment of consumer goods which are in keeping with esthetic

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demands, and to the further mechanization of agriculture and the solution of other important national economic tasks. Thus, compared with 1976, in the exports for the USSR which are planned for 1979 deliveries of computers of the ES-2640 type will increase by 46 percent, hay-mowers and cotton-combing machines -- by 59 percent, automatic telephone exchanges -- by 67 percent, scraper cranes -- by 93 percent, and molding machines -- by 550 percent. During this same period the Soviet Union will increase its deliveries of, for example, active electronic instruments by 107 percent, cinescopes for color television -- by 108 percent, EO type excavators -- by 150 percent, and modern T-150 tractors -- by 400 percent.

The dynamics of the mutual deliveries and purchases are to a high degree determined by production specialization and cooperation. Stable lines of the division of labor and of specialization and cooperation have developed. The basic elements in the specialization and cooperation of the GDR and USSR are the products of machine building and of the electrical engineering and the electronic industries and the output of the chemical industry. As a result of this development the GDR is now exporting the following percentages of its total output to the USSR: passenger railroad cars -- 80 percent, memory on magnetic tape -- 80 percent, ships -- 70 percent, automatic telephone exchanges -- 70 percent, mulcher-mowers -- 60 percent, refrigerator trucks -- 60 percent, tele-types -- 55 percent, and cold molding metal-working machine tools -- 50 percent.

Cooperation in the field of science and technology and also production cooperation are developing on the basis of more than 110 intergovernmental agreements. Some of their effect goes far beyond the year 1980. In this way, they are determining a substantial part of the strategic directions and chief tasks of the direction of labor between the GDR and the USSR in important branches of the economy until 1990.

All of the facts which have been cited and others also confirm that the structure of economic relations between the GDR and the USSR is developing very intensively in the direction of a mutually agreed upon exchange of finished products. The experience and results of all of the work to deepen specialization and cooperation which has been done over a period of three decades by both of our states testifies to the fact that in accordance with the decisions of the fraternal bodies -- the SED and CPSU, -- an increasingly full consideration is being given to the objective demands for an accelerated unification of the potentials of our countries.

Thanks to the program of production specialization and cooperation between the USSR and GDR for the period until 1990 which was worked out in accordance with the Crimea Agreement of the General Secretary of

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the CC CPSU and Chairman of the Presidium of the USSR Supreme Soviet L. I. Brezhnev and the General Secretary of the CC SED and Chairman of the State Council of the GDR E. Honecker, a new and higher level of economic and scientific and technical cooperation will be prepared and reached within the framework of socialist economic integration. This program maps out in a long term plan the chief directions for the further coming together of our economies. It embraces the division and cooperation of labor between the GDR and the USSR in all of the important branches of the economy. This kind of development is fully and entirely in accord with the letter and spirit of the Treaty on Friendship, Cooperation, and Mutual Assistance between the GDR and the USSR. This extremely important task is already in the stage of realization. The enormous joint work which is directed toward the future and toward the further successful development of our countries is developing in an atmosphere of brotherhood and communist mutual understanding in the name of the common task of socialism and communism. The SED attributes very great and principled importance to the fulfillment of this program, for in its concrete measures there is a reflection of the basic principles of cooperation between the GDR and the USSR. We are speaking about a close and continuing cooperation in the basic issues of economic development which is leading to an increasingly deep interweaving of the economies of both countries. Cooperation with the USSR has always been regarded in the GDR as a mobilizing and vitally important process in the genuine sense of these words which is characteristic for the present and, especially, for the future development of our country.

The further work on the specialization and cooperation program reflects a new stage in cooperation which is being determined by the social progress of both countries. In the USSR a developed socialist society has been built and the material and technical base of communism is being created. The GDR is following the path of constructing a developed socialist society. The new level of cooperation is also a result of the growing dimensions and breadth of the interweaving of our national economies, the modern tendencies in the development of the productive forces and of technological processes, and a further strengthening of the superiority of socialism over capitalism. We are speaking about a new level of cooperation in the overall process of deepening the international socialist integration which was mapped out by the Overall Program for Integration and by long-term special-purpose cooperation programs.

The development and realization of the production specialization and cooperation program is aimed at increasing the efficiency of the economies of our countries. What is involved is the further growth of the economy and a gradual change in its production structure which, above all, thanks to its orientation toward a substantially fuller use of raw materials and toward a higher degree of their refinement, serves as a

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fundamentally new approach in increasing labor productivity in the field of high quality products which promote the introduction of genuinely new technologies and which ensure highly effective exports and include a qualitative improvement of the assortment of consumer goods. These goals are to a large extent determined by the level of the production specialization and cooperation between the GDR and the USSR.

The proportion of the exchange of high quality products and technologies on the basis of this program will exceed the by no means low level which has to date been reached. However, this is not the only point. In economic practice it is customary to operate with generalized indicators and consolidated positions. Let us take, for example, the position of "machine tools." What is the nature of the machine tools which we today supply to one another compared with those produced ten and twenty years ago, and what will the nature be of the machine tools which will be produced in 1990 within the framework of the realization of the specialization and cooperation program? Surely, during that time the replacement of generations of machine tools will take place. The tendency is such that machine tools with electronic programmed controls will be predominant, and we will be exchanging not so much metal as electronics. And this itself changes the structure of relations. At the same time, specialization and cooperation will include completely new machines and instrument systems. This has to do, for example, with the entire wide set of the output of microelectronics, and also with the equipment necessary for this and the products based on its use. But this also applies to other products such as new materials, new transportation equipment, new installations and technologies in the field of nuclear equipment, and others.

With technological progress the assortment of products will become broader in our countries. New possibilities will appear for optimal specialization and cooperation which will lead to an improvement of the structures of our economies and to their increasingly supplementing each other. On the basis of an expansion of the assortment of products thanks to which we will accelerate scientific and technical progress both in the interests of introducing new technologies and of producing new consumer goods and products for export which are in demand on the world market new possibilities will naturally arise for specialization and cooperation in the field of the production of units for specific groups of products.

It is essential to create the conditions which make possible the introduction into production of the latest in technologies and the most effective scientific and technical achievements much more rapidly than has been the case to date. The GDR regards it as its task to make an even greater contribution to this work in the interest of the dynamic

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growth of its economy and the fulfillment of its commitments to the USSR and the other CEMA countries. The chief issue here is an increase in the economic might of our country as a whole and a strengthening of the material and technical base necessary for this.

The Tenth Plenum of the CC of the SED placed the question of strengthening the economic might of the GDR at the center of the attention of the party. This involves, above all, an absolute priority for the material and technical base. After a careful analysis and broad discussion of these questions, the Ninth Congress of the SED mapped out the basic orientations with respect to the formation of the most important economic complexes. They include a strengthening of the energy and the raw materials base, the development of the production of consumer goods and of the sphere of services and trade, the production of equipment for the economy and for export, the development of construction, the tasks of transportation and communications, of agriculture and timber resources, and of the food industry, and also further social development in the village.

After approving the economic complexes, the Ninth Congress worked out the basic directions for strengthening the material and technical base of the GDR. They embrace all of the problems which are vitally important both for further intensive expanded reproduction and for satisfying the material and cultural needs of the people. This concerns a more intensive use of energy, raw materials, materials, and working time. To increase production on the basis of existing resources with a simultaneous decrease in expenditures -- this is a demand which the party is increasingly placing at the center of party and political work and of all state and economic managerial work.

Only this position makes it possible to take account of the changing conditions of the use of the energy and raw material resources which are at the disposal of the economy of the GDR and to ensure the necessary growth of production. More than 240 billion marks were appropriated for these purposes during the five-year period (1976-1988), that is, approximately 60 billion marks more than was spent for the modernization, renewal, and expansion of fixed capital during the last five-year plan.

A constant study is made of the possibilities and the appropriate measures are employed for a fuller use of our domestic raw materials. Economic growth in the republic has to be achieved to a decisive extent on the basis of the development of its own energy and raw material resources. The strategic special-purpose position which has been mapped out for the 1980s provides in the long-term plan for covering 40 percent of our needs for raw materials on the basis of domestic extraction. For such important types of raw materials as petroleum, high quality natural gas, iron, copper, hard coal, phosphates, cellulose, cotton, asbestos, and



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others the development of the economy of the GDR in the long term also depends upon increasing imports, since there are either no deposits in the country, or they are negligible. There are deposits of brown coal, potassium, tin, clay, and other silicate raw materials which ensure the satisfaction of our needs in the future. Their use requires great economic efforts and expenditures as a result of a worsening of the geological conditions for extracting minerals. It is necessary to develop increasingly deeper deposits and small deposits with a low concentration of useful substances, which requires specific capital investments. At the same time, measures are being taken for a fuller use of secondary raw materials. The development of science and technology, socialist competition, and of the initiative of the workers is aimed at an economical expenditure of existing materials and raw materials. The economic importance of this task is characterized, for example, by the fact that the needs of the cardboard industry in the GDR for raw materials are satisfied by approximately 43 percent on the basis of pulp paper, the need of the food industry for glass packaging -- by approximately 60 percent on the basis of the multiple use of jars and bottles, and the need for raw materials by ferrous metallurgy -- by 70 percent on the basis of metal scrap.

What is involved, above all, is an increase in and the most economical use of existing resources and the discovery of new economic reserves. Thus, the expenditure of important national economic energy carriers, raw materials, and materials per 1,000 marks of industrial commodity output decreased in 1978 compared to 1970 by more than 21 percent, that is, by an average of 2.9 percent a year. Without this it would have been necessary in the industry of the GDR in 1978 alone to expend an additional 8 billion marks of raw materials, which is equal to 7 days of the country's industrial output.

An analysis of the conditions for further economic growth shows, however, that the accomplishment of present and future tasks demands dimensions of a completely different order. The average decrease which has been achieved of the specific expenditure of economically important energy carriers, raw materials, and materials of 2.8-3 percent a year is a very palpable result. In the economic plan for 1979 the task was set of achieving an even greater decrease -- approximately 4 percent. This requires even greater efforts. The task has been set of carrying out decisive structural transformations in the interest of economizing energy and materials.

From this point of view the forefront is now being occupied by a struggle for scientific and technological progress with even greater purposefulness, and the orientation of all of the branches of the economy toward a maximum use of its achievements. When the tasks in the field of science and technology are set in the economic plans of the GDR account

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will increasingly be taken of the fact that the scope of scientific and technologic achievements is growing at rapid rates. Scientific and technological results are a decisive source for increasing national income and for compensating for the growing expenditures which are connected with the domestic extraction of raw materials and the payment of imports.

The work of our party, state, and economic leaders is directed toward a clarification of a number of fundamental issues in this field. This concerns the introduction of new technological processes, and the production of new and removal from production of obsolete products. This concerns the purposefully directed realization of capital investments and of the necessary measures to increase the qualifications of our workers. Capital investments have to be used in a concentrated manner and at more rapid rates and they have to produce an economic effect more rapidly. This, in particular, applies also to the development and production of microelectronics which is one of the most important fields of cooperation with the USSR. The production and use of microelectronics is a key technology which makes it possible on a national economic scale to utilize reserves for further economic growth. The specific feature of this technology consists in the fact that it finds a use in absolutely all of the branches of the economy.

The great importance of modern and perfected equipment for increasing the might of socialism in the class conflict with imperialism has to be kept in mind. This path makes it possible to increase the strength of socialism and strengthen its superiority and it makes it possible to deprive imperialism of one more argument which it is vainly attempting to use against us. Lenin was convinced that socialism will be able "with enormous rapidity to develop the productive forces, to develop all of the possibilities which make up socialism, and to prove to everyone and to all graphically and visually that socialism contains gigantic forces and that humanity has now crossed over to a new stage of development which contains uncommonly brilliant possibilities."\*

The accomplishment of all of these tasks also demands to a definite extent a new approach to the question of economic responsibility on all levels, but especially and above all in the process of reproduction. In order to create the best preconditions for this combines have been created in almost all of the industry of central subordination and in the construction of the GDR. At the combines which include enterprises, scientific research institutions, enterprises for the production of rationalization equipment, and sales agencies a relatively closed process

\*V. I. Lenin, "Complete Works," Vol. 45, p. 402.

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of reproduction is organized which serves the production of definite final products of the economy. The combines which, as a rule, contain 20 to 40 enterprises are subordinated directly to the branch ministries. The combines have been given a great economic, and thereby, political responsibility. They are responsible, above all, for the dynamic growth of their indicators, and this necessitates the attainment of ever new scientific and technical achievements and the most rapid economic effect from their realization. This requires the introduction of modern technologies and the rationalization of production. The task has been set of achieving a higher economy of energy, raw materials, and materials.

As the experience which has been gained by the combines of the GDR shows, they open up possibilities for improving the quality and efficiency of labor. With their delivery of raw materials, materials, and highly productive equipment the combines make a great contribution to strengthening the material and technical base of our economy. They are developing the production of consumer goods on a wider scale and are attaining a higher effect through exports.

The development of the combines which are subordinated directly to ministries is taking place as a fulfillment of the decisions of the Ninth Congress of the SED. With few exceptions, beginning with 1980 the management of all enterprises in centrally subordinated industry and in construction will be carried out on the basis of the combines. Beginning with 1 January 1980 this will affect the work of 129 combines. In this way, 91 percent of those employed (approximately 2,413,000 people) in centrally subordinated industry and in construction will be working at combines of central subordination compared to 36 percent in 1976 (957,000 people). Around 90 percent of our scientific and technical potential (approximately 113,400 people) is now concentrated at combines, while in 1976 the figure was 44 percent (50,800 people). The share of the combines in industrial commodity production will increase to 88 percent compared to 41 percent in 1976. In order to achieve better management of the single reproduction process the combines have been given more than 200 additional enterprises, basically sub-suppliers.

The creation and work of the combines has suggested new conclusions in the field of improving planning and management. On the basis of positions of principle by E. Honecker, measures have been worked out to improve the management and planning of the work of ministries and of the State Planning Commission which takes account of the organization of production on the basis of the combines.

After the creation of the combines had been completed the task arose of improving the quality of managerial work. On the basis of the state planning assignments, the general directors of the combines have been

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charged with working out their own proposals as to the resources with which they intend to ensure the fulfillment and overfulfillment of these assignments. Every combine is faced with the task of increasing its economic contribution to the country's economy. This concerns, especially, a substantial shortening of the time involved in the introduction of scientific and technical results into the economy and the concentrated realization of those capital investments which are supposed to rapidly yield commodity output and the final product. In addition, the development and production of export products which provide a high currency profitability, and also of a greater number of higher quality consumer goods for the population is moving to the forefront.

In solving these and other problems connected with the development and strengthening of socialist production relations, we are always guided by the fundamental teaching of V. I. Lenin. Thus, the socialist planned economy of the GDR is being perfected on the basis of the general principles of socialist construction -- for the good of man and in the name of strengthening socialism.

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[Article by G. Gertsovich and L. Drobysheva: "The Management of Technological Progress in the European CEMA Countries"]

[Text] Overall systems of planning and stimulating scientific and technological progress and a rise in labor productivity are now being formed in the countries of the socialist commonwealth. These systems are based on the experience which has been gained in managing technological progress, on extensive experiments, and on reciprocal studies of experience. Taking account of the concrete conditions of the countries, they embrace all of the aspects of technological progress.<sup>1</sup>

In connection with the increased dimensions of production and the greater complexity of economic and social problems, the communist and workers' parties have set the top-priority task of shifting to intensive methods of conducting the economy, and a most important goal has been moved to the forefront -- to achieve an improvement in production efficiency and in the quality of work. An increase in the role of long-term plans, the use of stable long-term normatives, and a comprehensive strengthening of the cost accounting mechanism are becoming especially important here.

As was emphasized at the 25th CPSU Congress, only on the basis of an accelerated development of science and technology can the final task of

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of the social revolution be accomplished -- a constructed communist society.

The decree of the CC CPSU and USSR Council of Ministers "On Improving Planning and Strengthening the Influence of the Economic Mechanism on Increasing Production Efficiency and Improving the Quality of Work" has been called upon to play a great role in the accomplishment of this task. It provides for a system of very important measures to accelerate the realization of scientific and technical discoveries and developments and to increase on this basis the growth rates of labor productivity, and to achieve high final economic results. The decree maps out measures for a gradual transition to a system of physical and cost indicators which ensure the interest of enterprise collectives in improving the technical and economic indicators of production. The use of the net (normed) output indicator in planning and evaluating the work of an enterprise, and also an improvement of the procedure of forming the wage fund are creating economic stimuli for improving the entire organization of production, including on the basis of the introduction of new equipment and technologies.

The transfer of scientific research, designing, design planning and production designing organizations, experimental enterprises, scientific-production and production associations (enterprises) to a cost accounting system of organizing their work to create, master, and introduce new equipment on the basis of schedule orders and the application to these scientific-production and production elements of the system of bonuses and incentive prices for new highly effective output is a logical development of the cost accounting methods of planning and management.

At the present time the chief task of the CEMA countries is a maximum disclosure of the possibilities contained in socialist production relations. The development of the material and technical base has to be ensured to such an extent as corresponds with the modern productive forces and the demands of the scientific and technological revolution.

The economists of the CEMA countries (above all the GDR, Bulgaria, and Poland) note that in these countries conditions have been significantly improved for an acceleration of scientific and technological progress and for increasing its economic and social effectiveness. This has been achieved thanks to the development of powerful combines. The dynamism of the work of the combines has expanded, and at the same time possibilities have been created for the central economic agencies for an even greater concentration of their efforts on the solution of strategic tasks on an economy-wide scale.

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In keeping with the demands which are being raised by the construction of a developed socialist society and the conditions of economic development, the CEMA countries have decisively taken the path of increasing production efficiency. "It is now essential," writes E. Honecker, "to increase the rates of intensification and to obtain results of economic importance more rapidly. The possibilities for growth are being defined by factors of a qualitative nature. An increase in national income precisely on the basis of an increased economy of materials and a fuller use of working time and equipment -- such is the direction of our economic policy."<sup>2</sup>

Let us cite one more example. In Poland preparations are developing for the 8th Congress of the Polish Workers' Party whose CC has published its thesis "For the Further Development of Socialist Poland and for the Wellbeing of the Polish People." Speaking at a discussion of theses, E. Gierek emphasized the necessity for making certain changes in the operation of the Polish economy: "We shall take the path of improving the planning and management of production, of increasing labor discipline, of a wide introduction of cost accounting and a decrease in the cost of output, the path of improving the entire economic mechanism and of increasing production efficiency and improving the quality of work."

In a number of CEMA countries the Central Committee of the communist and workers' parties and the Councils of Ministers, with the participation of ministries and departments and scientists and practical workers, are conducting a large amount of work to prepare proposals on improving the economic mechanism in industry and capital construction. The essence of these proposals consists in a maximum orientation of the plan and of all management toward the accomplishment of the chief tasks of economic development, the achievement of high final results, an acceleration of scientific and technological progress, and an improvement of production efficiency and output quality. The chief tool here in realizing the economic policies of the communist and workers' parties of these countries is the national economic plan. This involves putting optimal decisions in the plan which ensure a dynamic and proportional development of all of the branches of the economy in accordance with the course aimed at an accelerated shift to the intensive factors of economic growth.

The CEMA countries proceed from the idea that scientific and technical assignments have to be worked out and controlled as carefully as the other component parts of the national economic plan. From this follows a strengthening of the directive nature of the plan for scientific and technical development and an increased role for long-term scientific research plans. In addition, the plan for science and technology becomes a very important component part of the national economic plan and increasingly permeates all of its sections. In recent years there has

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also been an increase in the importance of forecasting which helps to accomplish the tasks of technological progress and to carry out the scientific and technological revolution. A great deal of attention is being devoted to planning applied research, to scientific and technical development work, and to mastering and introducing into production new output.

The following system of interconnected scientific and technical plans is now taking shape in the countries of the commonwealth: long-term (for 15-20 years), medium-term (basically five years) and short-term. The assignments from the long-term plans go into the five-year plans, and from them into the short-term plans. The long-term and five-year plans are composed and controlled primarily on a state level, while the short-term plans are controlled in the cost accounting sphere. Along with state plans for scientific and technical development, branch plans for research and experimental work and also enterprise plans are made up.

In recent years state technical policy programs have been included in the state national economic plans of most of the socialist countries. The branch plans for the development of science and technology in industry contain primarily assignments which cover research and experimentation for such products as create the basis of the future development of the branches, and also for products connected with production specialization and cooperation. The scientific research and experimentation plans of enterprises include above all assignments which ensure rational solutions of production programs that promote a rise in the technical organizational and technical levels of production.

For example, in Bulgaria the plan for scientific and technical progress consists of four sections: scientific research and design planning work on the creation of new equipment and technological methods and on the organization of production; the development and testing of experimental machinery models and their preparation for series production; basic measures to introduce into production mechanization and automation equipment, new materials, and so forth; and the financing of scientific institutions. In Poland, as in a number of other CEMA countries, all scientific work is divided into three large groups: basic theoretical research, applied work and research for the accomplishment of branch tasks, and work on the introduction of already known technical and design research projects.

The basic directions of planning and of the organization of management in the Polish People's Republic are determined by party documents. The most important purposes in improving the planning and management of the

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socialist economy are: an increase in the long-term socio-economic effectiveness of the development of the economy and of all economic organizations, and also a strengthening of the strategic role of centralized planning; the development of social factors which speed up progress, especially a maximum development of the creative initiative and inventiveness of the workers; the creation of conditions for the mass dissemination and use of technical and technical economic innovations; and a wide use of foreign trade and a deepening of socialist economic integration in order to increase the effectiveness of economic performance in the country and to accelerate scientific and technological progress.

The state scientific research and technical development programs include concrete assignments which are put in them by the ministries or by leading central agencies. They represent proposals to the ministry of science, higher education, and technology which works out a summary program and sends it for approval to the Council of Ministers of Poland and the Planning Commission at the Council of Ministers for inclusion in the five-year and annual plans of individual departments or of the Polish Academy of Sciences.

Departmental-branch problems needing research are placed by the individual ministries and central agencies in the annual draft plans which are presented to the Planning Commission at the Council of Ministers of Poland. The Planning Commission examines these problems and draws up a summary plan which is approved by the Council of Ministers. In 1975 more than 450 assignments for the introduction of new equipment were carried out within the framework of the State Scientific Research and Technical Development Programs, and 490 of them within the Programs for Key Problems. The economic effectiveness of the introduction of new equipment in the basic economic departments in 1976 was estimated at 22.6 billion zlotys.<sup>3</sup>

Characteristic for a number of CEMA countries is a narrowing of the range of technological progress assignments which are planned centrally, and their differentiation in relation to on which level they are best able to be accomplished in the most overall manner. In Hungary, for example, the development of the long-term plan for the years 1971-1985 has been completed. Whereas in previous years 70 to 80 percent of the scientific research performed in the country was reflected in the state scientific research plan, today the figure is only one-third to one-quarter.

The five-year plans are the basic form of planning scientific and technological progress. The annual plans are made up on their basis. The following are among the indicators which are used in the CEMA countries in planning scientific and technological progress: the amount of work carried out for the scientific and technological progress plan (in physical and in value terms); a list of jobs and a products list of newly



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mastered products and equipment; the scientific and technical parameters of objects; time periods for the development, mastery, and introduction of concrete measures; and the cost of work as a whole and for individual elements (with a specification of financing sources). In certain CEMA countries the amount of economic effectiveness is planned as a calculation indicator.

The most important directions in improving the planning of scientific and technological progress are: a determination of the proportions between basic and applied research and production; correspondence to the basic directions of the development of science and technology; an increase in scientific and technical potential; the establishment of a close interconnection between research and production work; and a deepening of scientific and technological cooperation within the framework of socialist economic integration.

In a number of CEMA countries the development of long-term scientific and technical development plans include: the selection of the most promising branches and directions in which it is proposed to concentrate the maximum resources of scientific research and experimental designing organizations; a determination of the branches and direction of science and technology in which a country's own research is performed, and also of the countries in which it is proposed to purchase licenses and patents or to obtain technical documents; and the selection and inclusion in the plan of the topics and problems whose solution has to ensure the fulfillment of the individual sections of the long-term plan for the development of a country's economy, especially in the field of capital investments, and of the topics which are chosen in accordance with a conception of the long-term development of science and technology. The organizations which are responsible for the solution of the problems of the long-term plan are determined; a calculation is made of the number of scientific cadres necessary for the solution of the problems which have been set and of the dynamics of the growth of the number of scientific workers (a change in cadre structure and the planning of the creation of new scientific research and experimental designing organizations); a calculation is made of the expenditures needed to carry out the scheduled work (including currency for the purchase of licenses and patents); and a determination is made of basic directions and principles and the scope of the participation of countries in the international division of labor in the field of science and technology with the socialist and capitalist countries.

The experience of the GDR, Poland, Czechoslovakia, Hungary, and other socialist countries has shown that the state plan for the development of science and technology has included in it basically the most important assignments which are auspicious for the development of the economy and

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which require an extensive base for their accomplishment. As a rule, they are connected with the international socialist division of labor and with socialist economic integration.

In the Czechoslovakian Socialist Republic technical and economic conceptions and a long-term forecast of economic and social growth for a period of 15 to 20 years comprise the basis for working out the long-term national economic plan. The largest technical development programs which are worked out along with the plan within the Ministry for Technical Development and Capital Construction embrace: the development and use of electronics, electrical engineering, and applied cybernetics; the creation and use of new materials; the development of the country's energy enterprise; the provision for the population of foodstuffs; the creation of a modern material base and the industrialization of construction; an increase in the reliability level of machine tools and equipment and the development of machine building production processes; the renewal and modernization of individual machine building products; and environmental protection and the creation of the most favorable conditions for the harmonious development of health and people.

In order to improve the management of scientific and technological progress at the end of 1976 leading working groups were created within the above-mentioned ministry. One hundred and sixty such groups became centers for the preparation of overall materials on the developmental prospects of the most important branches and productions of international cooperation in the field of scientific and technological progress. They carry out systematic control over the rationalization of production and of the production structure. These groups maintain close contacts with interested ministries and departments and associations and large enterprises, which promotes a better coordination of their efforts. In order to stimulate the introduction into production of the achievements of scientific and technological progress the procedure for evaluating technically improved and high quality products and also the procedure for awarding bonuses has been changed for the present five-year plan.

In the GDR where great importance is attributed to the long-term planning of scientific and technical development the following are made up: a plan of basic research tasks in the field of the natural sciences (research plans); a program for the development of the most important branches and spheres of production; scientific and technical plans for groups of products and basic productions; a state scientific and technology plan; and an introduction plan. Moreover, the plan for the introduction of scientific and technical achievements into production is an organic part of the overall national economic plan. It includes assignments for scientific research work, the introduction of advanced technology and equipment into production, the mastery of new types of industrial output,

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the financing of scientific research work, and the training of scientific cadres. The classification of assignments by the degree of their national economic importance plays a large role in the composition of the scientific and technical research plan. This is determined by the goals of the research.

The state agencies of the GDR which direct the development of science and technology (above all The Ministry of Science and Technology) perform such strategic functions as the long-term forecasting and planning of scientific research. They concentrate monetary and material resources on the development of the most important branches of science and technology, coordinate the work of the organizations and departments which are engaged in scientific work (academic institutes and laboratories, departmental scientific research organizations, and vuzes), and carry out scientific and technical cooperation and scientific relations with foreign countries. The effectiveness of the measures of the scientific and technical research plan is determined in the GDR above all by the amount of the economy in the sphere of production which is achieved from their realization. Use is made here of the indicators of a rise in labor productivity, an increase in the amount of production, and a decrease in the cost of output with a simultaneous improvement of its quality.

In Hungary at the center of attention of the directing agencies is the directions of technological progress which help to more rapidly improve the structure of production in accordance with domestic and foreign conditions. Above all, special-purpose programs for the development of the country's economy are used. During the current five-year period 11 general state development programs have been singled out, including in the aluminum, pharmaceutical, and petrochemical industries, in computer equipment, and in the production of meat. The law on the fifth five-year plan of Hungary defines in detail the basic directions of technological progress which consist in the production of output whose reliability, quality, and strength corresponds to current requirements; the production of materials which possess the highest consumption value; the dissemination of production methods which ensure an economical use of energy, raw materials, and also production waste; the achievement of mechanization which help to release or economize labor power, especially the mechanization of intra-plant transportation, and the dissemination of the practice of capital construction which does not demand substantial construction operations.

The basic directions in improving the organizational structure of the management of scientific and technological progress in the CEMA European countries are: a strengthening of the branch management of all work in

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the field of creating and introducing new equipment in order to carry out a single technical policy; and the creation of production and scientific-production associations in which the full cycle of work is performed to create and master new equipment, including its launching in series and mass production. In addition, specialization is effected for the enterprises, institutes, and designing and technological organizations which are included in the associations. As a rule, the scientific-production association consists of a scientific research institute which is at the head of the association, a designing bureau for products and technological equipment, and also experimental enterprises and plans which produce series output.

Along with the associations, overall scientific institutions are organized in the CEMA countries which are capable of rapidly carrying out scientific research and experimental designing work for major problems. In Poland, for example, overall research centers are created which consist of institutes, designing and planning bureaus, and experimental plans.

The shift by scientific research and planning and design organizations which are within the associations to cost accounting and the use of contract prices for scientific and technical output helps to accelerate the introduction of scientific and technical achievements into production.

The importance and necessity of improving the economic mechanism for accelerating the realization of scientific and technical achievements is emphasized in the decisions of all of the communist and workers' parties of the CEMA countries. Thus, it was noted at the 8th Congress of the SED: "Quite a few outstanding research and design achievements lose their value to society to a large extent because they are introduced into production too late or on an insufficiently wide scale. The acceleration of this process depends especially upon how solidly we succeed in tying the scientific and technical work of research centers to production, above all at combines and at enterprises where its content, organizational forms, and economic determinants are already determined in the plan."<sup>4</sup>

Experience shows that in the CEMA countries the solution of a number of scientific research problems is frequently not concluded by introduction into practice. There are various reasons here. According to the data of GDR economists, an analysis of the difficulties which arise in realizing scientific research has shown that around half of these difficulties are connected with shortcomings in the selection of research directions, miscalculations in the research process itself, and difficulties connected with transmitting its results into production.

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In order to improve the situation connected with the introduction of scientific and technical achievements into production on 1 August 1973 in the People's Republic of Bulgaria a decree of the CC of the Bulgarian Communist Party and of the Council of Ministers was adopted -- "On Accelerating the Introduction of Scientific and Technical Achievements Into Production"<sup>5</sup> -- and then decrees of the Council of Ministers and other normative documents were adopted which provided measures for the creation (in relation to department and character of work) of introduction organizations in the following forms: centers for introduction and for scientific research work and development; a scientific-production organization, a scientific center, a departmental scientific research institute, and an institute at an economic organization for applied research, planning and designing, designing, and technological work and introduction; and bases for development and introduction and an experimental station.

The new organizations have been given the following functions: the development of scientific and technical economic forecasts, conceptions, programs, and proposals for the development of complexes and branches of production; unification and the development of standards; ensuring the patent purity of products and assistance in developing inventor and rationalizer work; the introduction of scientific and technical achievements into production by means of the use of national and foreign plans, decisions, licenses, documents, and "know-how"; the development of experimental models, including the technical and technological documentation for their introduction into series production; and a generalization of the experience in production work and the development and introduction of measures to improve quality, raise the technical level of output, and decrease the expenditure of raw materials and materials.

In recent years improvements have been made in the system of financing in stimulating scientific and technological progress in the European CEMA countries. A large stock of highly effective scientific and planning and design and development projects has been created. For this reason, as has already been noted, great importance is being taken on by the correct establishment of proportions between basic and applied research and between expenditures for research and development, on the one hand, and the amount of capital investments on the other, and also of proportions between expenditures for research and for the realization of its results. As for financing one or another topic or scientific and technical assignment, its amounts are determined in relation to the level of their national economic importance.

Expenditures for the development of science and technology are now growing at more rapid rates than national income. Thus, in 1976-1980 in the GDR expenditures for science will increase by 40 percent and will amount, as

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was noted at the 9th Congress of the SED, to 4.2 percent of national income. In Poland appropriations for the development of science will increase from 115 million zlotys in 1971-1975 to 200 billion during the current five-year plan. Expenditures for science in 1980 will come to 3 percent of national income. In Hungary the average annual rate of increase in expenditures for science came to 12.7 percent, which substantially exceeds the growth rates of national income. In Bulgaria these expenditures came to 2.16 percent of national income during the current five-year period, in Hungary -- 3 percent, in Poland -- 2.5, in Romania -- 1.26, in the USSR -- 4.7, and in Czechoslovakia -- 3.9 percent.

The countries of the socialist commonwealth are characterized by a system of planning and financing which includes, as a rule, three stages: national economic plans and programs which are financed from the state budget; branch technological progress plans which are financed from branch and ministry development funds; and plans for the reequipping of enterprises and associations which are financed from enterprise and association funds.

However, in each individual country this scheme is realized with regard to its specific nature and with diverse proportions of participation by the state budget and branch financing, and special characteristics in the formation of the technological progress funds and in their use.

The experience which has been gained by the socialist countries demonstrates to a sufficient degree that it is not possible to absolutize any one of the forms of financing in the development of science and technology. Neither excessively centralized financing from sources unconnected with the results of economic work of enterprises, nor "freedom" in financing this work which is connected with the creation of financing sources in essence without the capital investments plan has justified itself.

At the present time the financing and crediting of scientific research and development work in the CEMA countries is characterized by a greater special-purpose programmed and overall character than in the past. Overall and other programs for the introduction into production of scientific and technical achievements and basic scientific research are the objects of financing. This ensures direction and continuity in the financing of the single "science-production" process.

The overall programs for scientific and technical research embrace all of the expenditures connected with the carrying out the entire "science-production" cycle, regardless of their character, time, and place. These expenditures include outlays for scientific research, for the purchase of machinery and models, for the development and acquisition of experimental,

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laboratory, and semi-industrial equipment, and for the creation of prototypes; and outlays for the study and purchase of patents, licenses, "know-how," and documents for capital investments connected with the introduction of the results of domestic and foreign development work.

The special-purpose character of financing the introduction of scientific and technical achievements is ensured by the delimitation of the sources for financing the administrative and managerial expenditures of the organizations which carry out the introduction of the scientific and technical achievements and of the overall programs. The administrative and managerial expenditures are included in the overall costs of managing a complex, ministry, or organization. This is a fundamentally new aspect.

In the GDR funds are issued from the state budget for scientific and technical measures exclusively on the basis of a science and technology plan for financing selected complexes and important national economic assignments. The decision on the allocation of appropriations for concrete scientific and technical assignments is made by the Council of Ministers at the suggestion of the Ministry of Science and Technology within the framework of approved state planning indicators. Basic research is financed chiefly from the state budget and, moreover, the appropriations are assigned to concrete assignments.

In recent years in the People's Republic of Bulgaria the proportion of budgetary monies in the total amount of expenditures for the financing of scientific and technological progress has been approximately 50 percent. Of the total amount of budgetary resources one part is expended for the maintenance of budget scientific organizations, and the other is allocated to ministries, academies, and departments for measures connected with scientific and technological development.

During the last five-year plan in the Hungarian People's Republic around 30 percent of the expenditures for scientific research and development was financed from the budget. During the years 1976-1980 this proportion will be preserved.

The internal accumulations of enterprises and associations on the basis of which technical development funds are created are beginning to play an ever larger role in financing technological progress in the European CEMA countries. As a rule, these funds are formed by means of making additions to the cost of output. In addition, they are supplemented by income from the sale of patents and licenses and the sale of the output of experimental series and properties which have been created and purchased on the basis of the monies of this fund, by allotments from above-plan profits, and others. The amount of the additions to cost is

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differentiated by branches in accordance with their importance for accelerating technological progress in the entire economy and the expenditure levels for technical development in a given branch.

In the People's Republic of Bulgaria, the Polish People's Republic and the Czechoslovakian Socialist Republic there are a large number of funds and a wide range of measures are carried out which are financed through them, which leads not only to an increase in financial resources for the needs of technological progress, but also to a scattering of resources, and hence, to shortages of them. Although a strict special-purpose direction for the technical development fund is becoming increasingly characteristic of the CEMA countries, the monies from these funds are not always used precisely for their purpose (for example, as an additional source for financing capital investments) and with maximum effectiveness. They are not made full use of during the course of the year.

In analyzing the development of the overall systems of planning and stimulating scientific and technological progress, the Polish economists S. Spotan and Yu. Novak come to the conclusion that it is essential to solve the following problems:

- 1) a further improvement of the overall planning of scientific and technological progress, that is, from the development of a program for scientific research work to the introduction of new equipment;
- 2) an improvement of the financial and economic system, including the system of the material stimulation of the scientific and technological progress by means of coordinating the work of scientific research organizations with the development of individual branches;
- 3) the shifting of scientific research organizations to cost accounting at the branch level;
- 4) an improvement of the system of the material stimulation of development work which provides the economy with a substantial economic effect, particularly on the basis of contracts between the organizations which perform the scientific research work and enterprises (associations);
- 5) the fashioning of a system of information and inventorying the achievements of scientific and technological progress and its effectiveness.<sup>6</sup> Emphasis here is upon the necessity of using the mutual experience of improving the methods of economic management which exists in the countries of the socialist commonwealth.

There is now in operation in Poland a single country-wide system for financing and stimulating scientific and technological progress which



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was introduced during the last five-year plan; further experiments in this field are not planned. However, every year the Ministry of Science, Higher Education, and Engineering, and also the Planning Commission at the Council of Ministers of the Polish People's Republic and individual ministries analyze the results which have been achieved in the field of scientific and technological progress, and also negative tendencies which arise at individual production sectors. A careful check is made on the fulfillment of the annual planning assignments in the field of basic and applied research, the introduction of new equipment, and the effectiveness which is achieved. The experience and conclusions of the analysis are taken into account in working out the plans for future years. Experiments are carried out only in the field of introduction of technical organizational progress in order to provide assistance with its introduction by means of creating specialized enterprises.

An overall system of stimulating scientific and technological progress and labor productivity is only just being formed in the CEMA countries. Certain differences arise here among the countries. In some of them there are subsystems for stimulating scientific and technological progress, while in others there are no such systems.

Thus, in Hungary the stimulation of scientific and technological progress is provided for by the entire system of economic management. Special methods of stimulating scientific and technological progress are not being used at the present time. As Hungarian economists note, the collective material interests of the workers of production enterprises is maintained by the full aggregate of the levers of direct and indirect regulation which are directed above all toward increasing economic efficiency as measured by profits. Material incentives are effected with the assistance of the entire system of centralized management and economic regulation. This takes place as follows: technical development funds are created on the basis of allotment of a specific percentage of the cost of the output produced by a given branch or sub-branch.

The Chairman of the State Committee for Technical Development at the Council of Ministers of the Hungarian People's Republic Academician L. Pal has noted that in the electronics industry these allotments come to 5 percent of the branch's production, in pharmacology -- 6, in the food industry -- 3, and in the construction materials industry -- 2 percent. Two-thirds of these monies are put at the disposal of enterprises and are expended for incentives for specialists and workers and for the purchase of modern equipment and advanced technology. One-third is distributed among the ministries and the committee.<sup>7</sup> The uneven percentage of the allotments is explained by the importance of a given branch in exports, its ability to compete on the world market, and its place

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in the international socialist division of labor and in the realization of the demands of the Overall Program for Socialist Economic Integration.

One of the most important characteristics of the contemporary development of the economies of the CEMA countries consists in the fact that it is taking place in the system of the socialist commonwealth and that it takes account of the requirements of the international socialist division of labor and of socialist economic integration. This applies, above all to the sphere of science and technology. The coordinated use of the scientific and technical potential of the CEMA countries and the coordination of their long-term technical policies, of the basic directions and ways of developing scientific and technological progress, of the amounts and first-priority objects of financing, and also of the use of the results which are obtained, that is, the working out of a single strategy for planning science and technology, will provide the countries of the socialist commonwealth with an enormous political and economic effect.

In accordance with the Overall Program for a Further Deepening and Improvement of Cooperation and for the Development of the Socialist Economic Integration of the CEMA Member Countries, a forecast of the development of science and technology for ten to fifteen years is being worked out for the first time in the practice of their cooperation. This kind of coordinated scientific and technical policy for two to three five-year plans will make it possible to optimize the rates and proportions of the development of science and technology in the CEMA countries and to define the most effective ways of using material, financial, and labor resources in accomplishing the difficult social and economic tasks of socialist and communist construction.

FOOTNOTES

1. "An Overall System for Stimulating Scientific and Technological Progress and an Increase in Labor Productivity in the CEMA Member Countries." Collection of articles. Director of the work Professor B. Sukharevskiy. Scientific Research Institute of Labor of the USSR Council of Ministers' State Committee for Labor and Social Questions, 1978, pp 12-19 (henceforth -- "Overall System...").
2. KOMMUNIST, No. 13, 1979, p. 92.
3. "Overall System...", p. 182.
4. "Eighth Congress of the Socialist Unity Party of Germany," Politizdat, 1972, p. 43.

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5. D'RZHAVEN VESTNIK, No. 73, 1973
6. "Overall System...", pp. 204-205.
7. PRAVDA, 24 October, 1978.

BIBLIOGRAPHY

1. "Materials of the 25th Congress of the CPSU," Politizdat, 1976.
2. "On a Further Improvement of the Economic Mechanism and on the Tasks of Party and Government Agencies," 12 July 1979 Decree of the CC CPSU; "On Improving Planning and Strengthening the Influence of the Economic Mechanism on Increasing Production Efficiency and Improving the Quality of Work," 12 July 1979 Decree of the CC CPSU and USSR Council of Ministers, Politizdat, 1979.
3. "Eleventh Congress of the Bulgarian Communist Party," Politizdat 1977.
4. "Ninth Congress of the Socialist Unity Party of Germany," Politizdat, 1977.
5. "Seventh Congress of the Polish United Workers' Party," Politizdat, 1976.
6. "Fifteenth Congress of the Communist Party of Czechoslovakia," Politizdat, 1977.
7. "Overall Development Programs in the CEMA Countries," Izdatel'stvo "Mysl'," 1977.
8. "The Organization of an Improvement of Production Management," Izdatel'stvo "Ekonomika," 1977.
9. "The Scientific and Technical Policy of the Socialist Countries," Izdatel'stvo "Nauka," 1977.
10. "An Overall System for Stimulating Scientific and Technological Progress and Increasing Labor Productivity in the CEMA Member Countries." Collection of articles. Director of the work Professor B. Sukharevskiy. Scientific Research Institute of Labor of the State Committee for Labor and Social Questions of the USSR Council of Ministers, 1978.

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CEMA Integration in Transportation

Moscow VOPROSY EKONOMIKI in Russian No 3, 1980 pp 82-92

[Article by B. Gorizontov: "Integration of the CEMA Countries in the Field of Transportation"]

[Text] With the developing and deepening of the processes of socialist economic integration there is an important increase in the role of transportation. V. I. Lenin defined the external function of transportation as being the material implement of relations with foreign countries.<sup>1</sup> Under presentday conditions the transportation of the CEMA countries has turned into a material implement of socialist economic integration.

While it provides for the continuous work of the other branches of the economy and for the normal course of all of social reproduction, transportation continues the production process in the international sphere. It has an active influence on the economic efficiency of the international socialist division of labor. At the same time industry and, especially, machine building create within the framework of international production specialization and cooperation the necessary conditions for reequipping transportation on a new scientific and technical basis, which promotes its development and leads to a decrease in the expenditures for moving goods in international communications.

During the 30 years of the work of the Council for Mutual Economic Assistance, the fraternal countries have achieved large successes in cooperation in the field of transportation -- in improving the forms and methods of joint planning work, in coordinating international shipment and transportation equipment plans, and in making up forecasts of the development of transportation over the long term. Substantial work has been performed on reequipping many transportation lines of international significance, the joint construction of major transportation facilities is developing, international transportation organizations have been created and are successfully operating, and so forth. However, life is bringing up new problems whose solution is connected with a further development and improvement of transportation integration.

The current economic relations of the CEMA countries represent a developed system without which the normal functioning of the individual national economies is now impossible and which is accompanied by high growth rates for mutual commodity turnover. Under these conditions transportation is being faced by greatly increased demands of both a quantitative and a qualitative character. Today our basic attention is being given to mastering the latest achievements of science and technology. The countries of the socialist commonwealth have set themselves the task during the

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forthcoming two five-year plans of intensively developing international production specialization and cooperation and of making efficient use of its advantages. This is also making new and increased demands upon transportation which are connected with the necessity of ensuring rhythmic work and the safekeeping of specialized output which is being transported and of shortening delivery time.

In order to successfully accomplish this qualitatively new task it is necessary to substantially reconstruct transportation roads and to make use through joint efforts of new transportation equipment and technologies. It is completely natural from this point of view that a long-term special-purpose program of cooperation (LSPC) on the development of transportation relations was adopted at the 33rd Session of the Council for Mutual Economic Assistance. The program is a logical completion of the previously adopted long-term special-purpose cooperation programs in other branches of material production. The basic task of the LSPC on the development of transportation relations is a gradual adaptation of national transportation systems on the basis of improved equipment and advanced technologies for the most effective shipment of passengers and goods in international communications, and, consequently, the creation of the most favorable conditions for the further development of socialist economic integration. However, since transportation in the system of the CEMA countries is developing within national frameworks as an important component part of the national economies, the better it operates in the individual countries the greater the possibilities for its subsequent integration.

During the 30 years of the existence of the CEMA there has been an important development of transportation in all of the participant countries. High economic growth rates, the development of new areas, and the development of integration processes have led to a consistent growth of the freight turnover of all types of transportation which can be seen from the data cited below (in billions of ton kilometers):

	1950	1960	1970	1978	1978% 1950*
Bulgaria	3.2	11.0	58.0	80.3	25
Hungary	6.1	15.6	26.1	40.1	6.6
GDR	17.5	47.9	122.0	132.0	7.5
Cuba	....	3.6	60.9	51.3	14
Mongolia	0.03	3.2	2.2	4.0	124
Poland	44.7	104.0	220.0	467.0	10
Romania	9.1	22.7	89.6	141.0	16
Soviet Union	694.0	1814.0	3673.0	5656.0	8.2
Czechoslovakia	17.3	55.8	80.1	100.0	5.8

Sources: "Economies of the Member Countries of the Council for Mutual Economic Assistance," Moscow, 1974, p. 215; 1979; p. 219

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A substantial growth of freight turnover in all types of general use transportation is a general tendency for all of the CEMA countries. This is especially true of Bulgaria, Cuba, and Romania where during the above-mentioned period there was rapid economic development and a new structure of national economic complexes was formed. In Mongolia a network of transportation roads was practically created from anew and this explains the leap in the freight turnover of its transportation.

In the CEMA countries a substantial development of the material and technical base of transportation took place and this can be traced graphically on the basis of the example of the growth and improvement of their transportation networks (in kilometers):

	Year	Railroads	River lines	Motor Vehicle Roads	Pipelines
Bulgaria	1950	3,967	470	24.0	--
	1978	4,300	470	36.4	409
Hungary	1950	9,930	1,432	28.3	377
	1978	7,900	1,688	30.0	1,725
GDR	1950	15,945	2,919	45.7	--
	1978	14,215	2,538	49.3	1,301
Mongolia	1950	670	127	--	--
	1978	1,600	397	46.7	--
Poland	1950	26,312	3,695	261.0	--
	1978	26,900	3,754	256.0	1,851
Romania	1950	10,853	1,643	79.6	790
	1978	11,127	--	73.4	--
USSR	1950	117	130	1550	5.4
	1978	140.0	143.0	1410	64.0
Czechoslovakian Social- ist Republic	1950	13,124	458	--	--
	1978	13,200	475	73.5	1,469

In Thousands of Kilometers

Sources: "National Economies of the Member Countries of the Council for Mutual Economic Assistance," Moscow, 1974, pp. 221, 224, 229, 235; 1979, pp. 225, 229, 236, and 243.

In analyzing the data which has been cited it is not difficult to see that the enormous growth of the freight turnover of the transportation of the CEMA countries has not been accompanied by a corresponding growth in transportation lines. Consequently, the mastery of the new freight flows occurred to a substantial extent through an intensification of the use of the existing transportation network.

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New transportation construction has been carried out in all of the CEMA countries, but its scope has been varied. In the Soviet Union, in order to develop the productive forces in the new areas and also to improve the maneuverability of the network new railroad construction has been consistently carried out. During the period from 1950 through 1978 around 1,000 kilometers of railroads were built every year. Among them is the Baykalo-Amur Main Line which has the task of assisting in the development of natural resources and providing an additional exit to the shores of the Pacific Ocean.

In the European socialist countries the construction of new railroads was especially intensive in Bulgaria, Romania, and Poland, which is connected with the necessity for meeting increased shipments as a result of rapid economic growth and the development of foreign economic relations. At the same time, in the GDR and Hungary the overall length of railroad lines decreased somewhat through the closing of inactive sectors which did not meet the current demands of economic development.

The construction of new motor vehicle roads was especially intensive in the Soviet Union and Bulgaria. In the other European socialist countries it was basically the task of reequipping the motor vehicle road network that was accomplished.

The structural changes in it represent an important tendency in the development of the transportation of the CEMA countries. From 1950 through 1978, under the influence of the scientific and technological revolution and with regard to world tendencies and the specific nature of the transportation of the socialist commonwealth, there occurred an important redistribution of carrying work among the individual types of transportation (in a percentage of the freight turnover of all types of general use transportation):

[Table on Following Page]

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	Year	Rail- road	Mari- time	River	Motor Vehicle	Pipe- line
Bulgaria	1950	80.3	10.1	4.9	4.7	--
	1978	21.4	61.6	3.0	12.4	1.6
Hungary	1950	89.6	1.0	7.9	1.5	--
	1978	61.1	11.7	4.7	14.6	7.8
GDR	1950	85.9	--	8.5	5.6	--
	1978	40.1	47.4	1.5	7.3	3.6
Cuba	1950	30.5	50.0	--	19.3	--
	1978	3.6	93.4	--	2.9	--
Mongolia	1950	37.4	--	--	62.6	--
	1978	67.6	--	0.1	32.2	--
Poland	1950	78.6	20.3	0.6	0.5	--
	1978	29.6	64.0	0.6	2.2	3.6
Romania	1950	83.4	6.7	7.3	0.5	2.1
	1978	45.0	42.5	1.6	7.4	3.4
USSR	1950	86.8	5.7	6.7	0.1	0.7
	1978	60.6	14.4	4.3	2.1	18.6
Czechoslovakian Socialist Republic	1950	93.5	--	4.4	2.1	--
	1978	64.9	12.9	3.2	9.2	9.8

Source: "National Economies of the Member Countries of the Council for Mutual Economic Assistance," Moscow, 1979, pp. 220-221.

The advantages of planned economic management with regard to transportation manifest themselves in the fact that its individual types are used most fully in accordance with the technical and economic characteristics of each of them and the spheres of their rational application. These advantages make it possible during various time periods and on the basis of the chief social and economic problems which are being solved to develop individual branches of transportation at more rapid rates.

The above-cited data testifies to the rapid growth of shipments by maritime transport to whose development the CEMA countries have been devoting ever-increasing attention since the middle of the 1960s. The steady growth of the maritime merchant fleet of the states of the socialist commonwealth and the substantial increase in its share of overall commodity turnover are the result of the ever-increasing inclusion of the CEMA countries in the international division of labor.

In the Soviet Union pipeline transportation has received a substantial development. New conditions connected with a deepening of integration processes have also led to the appearance of this type of transportation in other CEMA countries. The proportion of railroad transport is decreasing, especially in Cuba, Bulgaria, and Poland. However, this does not mean that railroads are losing their former importance as the chief type of transportation which takes care of the mutual deliveries

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of most of the CEMA countries. The decrease in the proportion of railroad transportation is taking place as a result of a shift of part of the shipments to other types of transportation on which it is more economical to carry them out. The absolute freight turnover of railroad transport, however, continues to increase. Thus from 1950 through 1978 it increased in the People's Republic of Bulgaria by more than 6.5 times, in the Hungarian People's Republic -- 4.5, in the GDR -- 3.5, in the Polish People's Republic -- by almost 4 times, in the Socialist Republic of Romania -- by more than 8 times, in the USSR -- almost 6 times, and in the Czechoslovakian Socialist Republic -- by 4 times.<sup>2</sup>

Another important tendency in the development of the transportation of the CEMA countries has been the modernization of already existing transportation lines and their adaptation to the new demands of the economic development of the individual countries and of the international socialist division of labor. Let us examine these processes through the example of railroad transport. In accordance with the demands of technological progress, the level of its development is now being determined by the introduction of electric traction. The CEMA countries have achieved a high level of electrification for their railroads. Their total length at the beginning of 1979 was 57,085 kilometers. The successes in the field of electrification of railroad transport stand out more clearly for the proportion of electrified lines in the total length of the network. At the end of 1978 the proportion of electrified lines in the total length of the operational railroads came in Hungary to 17.5, in the GDR -- 10.7, in Cuba -- 2.9, in Poland -- 27.1, in Romania -- 18.4, in the USSR -- 29.2, and in Czechoslovakia -- 22 percent. The electrification of railroads in the countries of the socialist commonwealth has been carried out at rapid rates. Thus, as recently as 1960 there were no electrified railroads in Bulgaria, while in 1978 their proportion in the total length of railroads came to one-third.<sup>3</sup> Priority is given in electrification to the basic railroad lines with the greatest freight intensity or to lines with a heavy profile.

In summing up what has been said, it may be noted that definite work to develop transportation has been carried out in the CEMA countries: existing types have been modernized, new ones are developing, and there has been a substantial improvement in the coordination of the work of the individual types of transportation. However, there are still a number of unsolved problems in the development of transportation in the countries of the socialist commonwealth. An analysis of the investments which are allocated for the development of this important branch of the economy shows that they provide for only the most urgent needs of the development of transportation. The structure of the capital investments which are assigned to transportation is such that the vast majority of resources are expended to strengthen the already existing system. This makes it possible to master new shipments with relatively small

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capital investments and to achieve an enormous economy of resources in the CEMA countries. However, this practice has also inevitably led to a large increase in freight intensity and to a concentration of shipments on individual directions. Thus, for many years now the level of the use of railroad transportation in the USSR has been the highest in the world. Soviet railroads which have a length of 140,000 kilometers perform the same volume of work as all of the basic railroads of the world which have a length of 1,200,000 kilometers. Every kilometer of road in the USSR is used five times more intensively than in the United States and 7 to 10 times more intensively than in the industrially developed countries of western Europe.

In recent years in the transportation development plans of the CEMA countries the basic attention has been devoted to reinforcing rolling stock sometimes to the detriment of the development of lines, junctions, piers, and other immobile transportation equipment. This kind of development sometimes leads to the appearance of a discrepancy between the capacity of a line and junctions and the circulating rolling stock, between the capacity of a port and the number and tonnage of ships, and so forth. At the present time there are definite difficulties in the operation of Soviet railroads and, for the reason cited above, on a number of important lines they are operating under strain. Similar difficulties can also be seen in the transportation of the other CEMA countries. It is clear that greater attention has to be given to the development of transportation in order to correct the situation which has arisen. At the 25th CPSU Congress L. I. Brezhnev said that "during the forthcoming period we shall have to allocate more resources for an accelerated development of transportation, communications, and the system of material supply -- everything that is called the infrastructure. In the past we simply were not able to devote the necessary attention to many of these spheres, particularly road construction and warehouse work. Now we shall have to work on this and work on it seriously."

Transportation is not only a continuation of the process of production, but a general condition for its normal functioning. For this reason the development of transportation has to outstrip the growth of production somewhat. This is especially important now when the CEMA countries are carrying out the construction of the material and technical base of developed socialism and communism and are deepening socialist economic integration.

The adoption by the 23rd Session of the Council for Mutual Economic Assistance of the LSPC for the development of transportation relations is a qualitatively new stage of cooperation in the field of transportation. The development of the LSPC on transportation was based on a solid foundation and by cooperation practice in this field which has been tested over many years. A testimony to this is a successful fulfillment of the

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basic assignments on transportation contained in the Overall Program for Socialist Economic Integration.

The CEMA countries have already created a whole system of cooperation in the field of transportation. Gradually developing and improving, integration processes in transportation have practically embraced all of the aspects of its production work.

The most important directions in the integration of transportation are: joint planning work and the coordination of plans for the development of international shipments and transportation equipment; joint transportation construction; the work of international transportation organization; and cooperation in the field of rates.

Joint planning is the chief direction in the integration of transportation. In this respect, the CEMA countries have covered a long road -- from a simple coordination of the amounts of international shipments to the working out of forecasts of the development of transportation over the long term. Of great importance are the "Basic Directions and Tasks of Cooperation by the CEMA Member Countries in the Field of Transportation for the years 1976-1980 and for the Subsequent Period" which was worked out by the CEMA Permanent Commission on Transportation. This document develops and adds to the assignments of the Overall Program, and it was at the basis of the development of the LSPC on the development of transportation relations.

Adapting their transportation to the new conditions connected with the development of socialist economic integration, the CEMA countries have already carried out a substantial amount of transportation construction. The importance of such a very large transportation project as the "Druzhba" Petroleum Pipeline is widely known. Another joint construction project has been completed -- the "Soyuz" Gas Transportation System. The special feature of this construction consists in the fact that the gas pipeline was built through the joint efforts of the fraternal countries. The entire tract was broken up into sections whose construction was completely taken care of by the corresponding participant country. Practically within the course of a single five-year plan Europe's largest gas and chemical complex and a gas transportation system of unique technical parameters with a length of 2,677 kilometers and a carrying capacity of 28 billion cubic meters of gas a year were created.<sup>4</sup> One more transportation project has been put into operation -- the Il'ichevsk-Varna Ferry System which was built by the USSR and the People's Republic of Bulgaria.

Transportation organizations occupy an important place among the international branch organizations of the CEMA countries. They have been created in practically all types of transportation. For example, the

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Common Freight Car Pool is the largest international railroad organization. From its founding in 1964 until the present time the number of cars has increased from 95,200 to 290,260 units, that is by more than 3 times. The total freight capacity of this organization has increased from 2 million tons to 7.5 million tons. The amount of hauls has increased from 11,000 to 25,400 cars per day. There have also been qualitative changes: the proportion of four-axled cars has increased from 2.7 to 40 percent.<sup>5</sup>

Recently the Soviet Union, Hungary, Czechoslovakia, and Bulgaria created a new joint transportation organization -- "Interlighter" -- with a headquarters in Budapest. The lighter system is a new element in the practice of world shipping; it makes it possible to carry out shipments in a single "river-sea" scheme. Ordinarily cargoes from Danube ports were delivered on river barges to the mouth of the river where they were loaded onto maritime vessels. With the creation of the lighter system things changed rapidly. Loaded lighters -- non-self propelled barges with a freight capacity of 1100 tons -- are taken by barge down the Danube to the port of Izmail where they are loaded on board a maritime vessel -- a lighter carrier -- which takes on 26 lighters at a time and carries them to their ports of assignment. As the first runs by the lighter carrier "Yulius Fuchik" to the ports of India and Pakistan have shown, this method of delivering freight is very effective. A special feature of "Interlighter" is the fact that it is the first joint transportation enterprise to operate on the basis of the principles of complete cost accounting. "Interlighter" is an open organization and other states may join in its work.

The CEMA countries have created and are developing a Single Container Transportation System which is based on the use of large-tonnage all purpose and special containers. The overall amount of container shipments has increased compared to 1970 by 2.2 times and in 1977 came to 69.9 million tons, with 21.3 million tons of cargo carried in large-tonnage containers.<sup>6</sup>

Recently the countries of the socialist commonwealth have carried out joint work to improve price setting for international hauls. Within the CEMA Permanent Commission on Transportation work has been done to prepare a new International Railroad Transit Rate and new rates for the use of freight cars. An International Motor Vehicle Freight Rate has also been worked out.<sup>7</sup>

All of this has created new possibilities for determining the basic future directions of the development of transportation on international lines and for an overall solution of major transportation problems through joint efforts and with regard to the latest achievements of

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scientific and technological progress. Completing the process of production in the sphere of distribution, transportation is connected in the closest way with all of the other branches of the economy, which also applies fully to transportation routes of international importance. For this reason, in working out the development prospects of transportation two groups of issues require examination and substantiation: What demands will be put before transportation in the future and how would it be best to develop transportation in order to provide for these demands?

Replying to the first question in a general way it can be said that transportation will have to take care of an ever increasing amount of passenger and freight hauls under the conditions of a further development of socialist integration. The economic relations between the CEMA countries have a stable tendency toward constant growth. The amount of their mutual trade from 1950 through 1978 increased by 22 times, and its growth rates substantially outstrip the growth rates of national income and industrial production.<sup>8</sup>

From 1960 through 1978 freight shipments among the CEMA countries increased by 4 times, and passenger hauls by 10 times. According to forecasts made by the CEMA Permanent Commission on Transportation, by 1990 passenger hauls among the countries of the commonwealth will increase by 2 times and freight hauls by 60 to 80 percent.<sup>9</sup>

Transportation will have to provide with the greatest efficiency for all of the needs for hauls for the fulfillment of the long-term special-purpose cooperation programs in the other branches of material production. Put this way, the matter acquires a more concrete content, for each of the programs has its own specific nature and this makes diverse demands upon transportation support. In addition, it is necessary to take account of the general characteristics of the region of the CEMA countries, the level of transportation development which has been reached, and the basic tendencies in solving the most important problems within the framework of realizing the long term programs in the other branches of material production. On the basis of what has been said, it is advisable to discover the factors which reduce the demands upon international hauls and the factors which increase these demands.

The international socialist division of labor in the fuel and raw material branches of industry leads to the greatest work load on transportation. However, it has to be considered that the use of the latest achievements of the scientific and technological revolution is introducing many new elements into the solution of this problem. Thus, the creation of the Unified Electric Power System of the CEMA countries is increasing the possibilities for transmitting electric energy from one country to another and may help to form a tendency to reduce the growth rates of hauls of energy carriers in international communications.

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Atomic energy has an important place in energy supplies for the CEMA countries. A program for the construction of atomic electric power stations has been developed within CEMA whose realization will produce an increase in capacities which comprises more than one-third of the total present electric energy potential of the European CEMA countries and Cuba. As is known, an accelerated development of electric energy is accompanied by reduced demands upon transportation. One should also mention the development of a general tendency connected with international deliveries of output that has undergone a greater degree of processing, which in a large number of cases greatly reduces the work load on transportation.

The problem of distance is beginning to be given increasing consideration in dealing with the questions of siting large industrial productions of international significance which have been scheduled for construction. Thus, in accordance with a new agreement on the development of the chemical and microbiology industries, the production of energy intensive chemical output will be expanded in the USSR (ammonia, methanol, and polyethylene) in exchange for low-tonnage and less energy intensive output which is produced in the other CEMA countries (chemical plant protection agents, dyes, and other materials for light industry).<sup>10</sup>

It should be especially emphasized that much has already been done by the CEMA countries for the transportation of fuel in international communications on the basis of the development of a powerful network of pipelines and gas pipelines. Thus, by 1978 more than 500 million tons of Soviet petroleum had been pumped through the "Druzhba" Petroleum Pipeline. As the calculations of GDR specialists show, the amount of actual gas which will be supplied to this country through the "Soyuz" Gas Pipeline will correspond to the energy of 20 million tons of brown coal.<sup>11</sup> To this should be added the successful operation of olefin pipelines between the USSR and the Hungarian People's Republic, the GDR, and the Czechoslovakian Socialist Republic. The development of pipelines has not only provided effective transportation for petroleum, gas, and chemical output, but has also substantially reduced the workload on other types of transportation.

At the same time, the action of a number of factors will lead to an increase in the workload on transportation. First, a further development and deepening of the integration process between the CEMA countries will inevitably lead to an increase in foreign economic relations, which will increase the demands upon transportation. Secondly, in the future we can expect an expansion of economic relations between the CEMA countries and third states, and, especially, with the developing countries, and this will inevitably increase the workload chiefly on maritime transport. Thirdly, the process of the development of the productive forces in newly developed areas will continue in the CEMA

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countries and, above all, in the Soviet Union. The raw materials, fuel, and industrial output which are obtained there will inevitably get into the sphere of integration, which will also increase the workload on transportation. Fourthly, with the development of integration we can expect a further increase in the dimensions of the joint construction and operation of large industrial facilities. The estimated cost of such facilities has already reached approximately 9 billion rubles. This will also increase the workload on transportation.

And, finally, and fifthly, there is a question of fundamental importance. Until recently the basic attention regarding transportation support was devoted to the solution of the fuel and raw materials problem and at certain stages of the development of integration this was entirely correct. At the present time however, along with this there has arisen an urgent necessity to concentrate our attention also on the problems of transportation support for the development of international specialization and cooperation in the processing branches of industry, and, especially, in machine building as the chief direction of improving the integration of the CEMA countries during the coming two five-year periods. This is making not so much quantitative as new qualitative demands upon transportation. First of all, in order to establish an efficient production specialization it is necessary to perform work on the transportation factor which could have an important influence on the efficiency of this process. This raises the problem of determining the most rational places for the siting of specialized enterprises. With the international specialization and especially cooperation of production transportation does not simply deliver individual parts and units. With its help a rhythmic conveyor has to be set up which provides for the complete safe-keeping of the products being transported, and this will require the development and use of new transportation technologies, the extensive use of containers, and so forth. Further container support for shipments is connected with the realization of the LSPC in the production of consumer goods.

In considering the second group of problems which are connected with determining the basic directions for the future development of transportation special mention has to be given to the necessity for using the latest achievements of scientific and technological progress. In his day K. Marx emphasized that "it is precisely the revolution in the method of production in industry and cropping which made necessary a revolution in the general conditions of the social process of production, that is, in the means of communication and transportation."<sup>12</sup> This fundamental proposition is important in our day when under the influence of the scientific and technological revolution a fundamental reconstruction of transportation equipment is taking place and new, improved transportation technologies are being created. With regard to the CEMA

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countries the problem exists of the necessity of using and uniting the advantages of socialism on an international scale with the latest achievements of science and technology. It is from this point of view that the basic measures of the LSPC in the field of transportation are considered.

This program provides for the solution of the problems of developing effective transportation communications between the CEMA countries, border railroad junctions and ports, an expansion of container and other progressive methods of shipment, and the mechanization of loading and unloading work. The realization of these basic directions is accomplished with the help of the conclusion of agreements on individual important issues. Thus, agreements on cooperation in the field of railroad transport provide for the reconstruction and reequipping of leading international lines, the construction of two railroad border passages from the Soviet Union to Hungary and Czechoslovakia, and a further development of a single container system. Agreements have been signed on the development and reconstruction of motor vehicle roads in the directions of Moscow-Warsaw-Berlin and Moscow-Bucharest-Sofia. A number of agreements define cooperation in the field of civil aviation, particularly in the development of international airports and the joint operation of individual international airlines. Preparations are in progress for the conclusion of a number of other agreements.<sup>13</sup>

The CEMA countries have been compelled to solve a problem of historical origin which is connected with the different widths of the rails of their railroads which makes it necessary to reload many tens of millions of tons of diverse freight at the western border stations of Soviet railroads. New transportation construction through the joint efforts of the interested countries is planned for the solution of this problem. As practice has shown, the introduction of wide-gauge rails on the territory of the integration partners has completely justified itself. Thus, the introduction of the wide rails of Soviet railroads from Reni (USSR) to Galats (Socialist Republic of Romania) and from Uzhgorod (USSR) to Koshitse (Czechoslovakian Socialist Republic) has substantially removed strains in the shipment of mass freight.

The construction of a wide-gauge railroad between Vladimir Volynskiy (USSR) and Katowitse (Polish People's Republic) has now been completed. It was carried out in accordance with a Soviet-Polish agreement signed in 1976. The new railroad which is more than 400 kilometers long will substantially improve communications between the two fraternal countries and, most important, will make it possible to eliminate the reloading of numerous cargoes at border stations. What is involved is uniting the Krivoy Rog Iron Ore Basin with the Silezian Hard Coal Basin by the shortest and most economical transportation route.



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The Polish ferrous metallurgy giant in Katovitse operates on Soviet iron ore. Its delivery involving reloading and border stations is connected with great difficulties and costs. In 1980 almost 12 million tons of Krivoy Rog ore will have to be delivered to the combine in Katovitse and in 1990 -- 16 million tons. In the future an increase in deliveries to the USSR of coking coal and sulphur from the Polish People's Republic is expected. Under these conditions, the construction of a railroad was the most economical solution of the problem. The track of the new line intersects the Visla, the San, and the Bug. In addition to four large bridges, around 560 different kinds of service installations had to be built on it. The use of the existing narrow-gauge railroad made it possible to accelerate the construction rates. The USSR delivered 62,00 tons of rails and 800,000 ties for the new line. The total cost of the construction came to 18 billion zlotys. The implementation of the complex of measures will make it possible to bring the freight capacity of freight trains on the east-west lines to 4,000-4,800 tons, and on the north-south lines to 3,000-4,000 tons, and to increase the maximum speed of freight trains to 100 kilometers an hour and of passenger trains to 120 to 140 kilometers an hour. As a result, the carrying capacity of the lines will substantially increase.

The CEMA countries will have to solve a large number of problems in the field of motor vehicle transportation. It is planned to substantially strengthen its material and technical base in the near future. It is essential to increase the participation of motor vehicle transportation in international hauls. This is especially important now with the intensive development of international production specialization and cooperation with which in a number of cases hauls can be taken care of especially efficiently by trucks. In addition, there is every reason to expect a further development of passenger hauls by buses in international communications.

In this connection, the task exists of the reconstruction and new construction of motor vehicle roads, above all of international significance, the organization by interested countries of the operation through their common efforts of motor vehicle transportation lines, and the creation of joint motor vehicle transportation enterprises. It is clear that international motor vehicle roads have to be properly supplied to service passengers and transportation equipment: motels, camping grounds, service stations, and so forth.

The countries of the socialist commonwealth are planning a consistent solution of the problem of developing freight hauls by the most effective method -- in containers. Within the framework of a further development of the Single Container Transportation System it is planned to increase the amount of container hauls between the CEMA countries by approximately 2.5 times by 1985, and by 4 times by 1990 compared with the expected volume of hauls in 1980.

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The CEMA countries are considering the possibility of including the most important measures in the field of transportation in a coordinated plan of integration measures.

In addition to the adoption of the LSPC on transportation, a corresponding sub-program on machine building is being composed in order to provide the necessary output for the planned measures to reconstruct and develop the transportation of the CEMA countries. This kind of approach is natural and it testifies to the overall nature of the tasks being accomplished.

The reconstruction of existing lines of communication and the construction of new transportation facilities in the future will lead to a change in the structure of transportation which services the international relations between the CEMA countries.

Railroad transportation will continue to be the basic type of transportation and in the future will account for more than 50 percent of the international shipments between the CEMA countries. At the same time, its proportion will decrease somewhat. The importance of maritime, motor vehicle, and pipeline transportation will increase in international shipments. Serving the sphere of the international socialist division of labor, each type of transportation will be used most efficiently.

The 33rd Session of the CEMA adopted an important decision to apply to the Socialist Republic of Vietnam the fundamental propositions of the Overall Program on Special Measures to accelerate the development of its economy as was done with respect to Mongolia and the Republic of Cuba, in order to help the heroic Vietnamese people in socialist construction. This position, of course, applies fully to transportation also. Mongolia has already been given important assistance in the formation of its transportation system: the Trans-Mongolian Railroad Line and a line connecting the Darkhan industrial area with the country's basic railroad network have been built. The CEMA countries are providing assistance for the Mongolian People's Republic in the development of motor vehicle and air transport, and also in working out the principles of the creation of a transportation system for the country as a whole. Important assistance in the development and formation of its transportation system is also being given to the Republic of Cuba with regard to the specific features of this country.

The restoration and organization of the normal operation of the "unity" railroad between Hanoi and Ho Chi Minh is the most important transportation problem for the Socialist Republic of Vietnam. This line connects the deltas of the two great rivers -- the Red and the Mekong Rivers -- where the basic agro-industrial potential of the republic is concentrated. In 1977 the main transportation artery of Vietnam which connected the

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country's north and south hauled 420,000 passengers and 106,000 tons of freight.<sup>14</sup> This, of course, does not meet the demands which are being made upon it. For this reason, the Soviet Union, Hungary, Poland, and Czechoslovakia are already providing important assistance in the restoration and reconstruction of the line, supplying diverse equipment and specialists for this purpose.

As was stated at the 33rd Session of the CEMA by the Chairman of the USSR Council of Ministers A. N. Kosygin, the development and approval of long-term special-purpose cooperation programs is only the initial stage of the work. We shall have to develop the programs into a whole system of agreements which concretely define the terms and periods of cooperation and the commitments of the participating countries. In order to develop programs and consistently accomplish important tasks with their help it is essential to develop serious scientific research through the joint efforts of CEMA scientists and specialists, especially in the field of economics. It appears that with regard to transportation it is necessary first of all to define the general direction and the chief goal and to solve the individual problems stage-by-stage on the way to the realization of this goal. This goal, it seems to us, should be the creation in the future of an integrated transportation system for the CEMA countries.

All of the experience which has been gained by the CEMA countries in cooperation in the field of transportation and the enormousness and importance of the tasks connected with a further development of integration which are being accomplished with its help testifies to the timeliness of putting the question this way. In this respect account also has to be taken of the specific characteristics of transportation which is profoundly international in its nature. The fixed capital of transportation (rolling stock) can successfully be moved beyond the limits of state borders. As practice shows, precisely because of this transportation was the first and largest sphere of integration among the CEMA countries. This is also witnessed by the long standing work of the international transportation organization of the CEMA countries of the joint operation of transportation equipment. The necessity for this approach is also a result of the fact that transportation of a material implement of integration has to develop at somewhat outstripping rates. Only if this condition is observed can the success of integration as a whole be ensured.

All of the above-cited circumstances bear witness to the fact that transportation has to be given priority in the development of integration processes, and that the experience which is obtained here can be transferred to improving integration in the other branches of material production. In our view, an integrated transportation system should be understood as the kind of adaptation of the kind of transportation

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systems of the CEMA which would be achieved with regard to the latest achievements of scientific and technological progress and would consist of well supplied and effectively operating international railroads, petroleum and gas pipeline systems, water and air routes, and motor vehicle roads. The basic function of the integrated transportation system should be the movement of the ever increasing commodity masses resulting from the international socialist division of labor with the smallest expenditures of live and embodied labor.

FOOTNOTES

1. V. I. Lenin, "Complete Works," Vol. 44, p. 302.
2. "Economies of the Member Countries of the Council for Economic Assistance," Moscow, 1979, p. 227.
3. Ibid., p. 225.
4. "Economic Cooperation of the CEMA Member Countries," No. 1, 1979 p. 84.
5. Ibid., p. 80.
6. Ibid.
7. "On the Ways to Further Improve the Economic Principles of Cooperation Between the CEMA Member Countries in the Field of Transportation." Materials of an International Symposium, Warsaw, 1978, p. 12.
8. PRAVDA, 30 June 1979.
9. Ibid., 3 March 1979.
10. Ibid., 30 June 1979.
11. "Economic Cooperation of the CEMA Member Countries," No. 1, 1979, p. 85.
12. K. Marx and F. Engels, "Works," Vol. 20, p. 395.
13. PRAVDA, 30 June 1979.
14. Ibid.

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Conference on Economic Management

Moscow VOPROSY EKONOMIKI in Russian No 3, 1980 pp 155-157

[Article by Ye. Kogan: "An Improvement of Economic Management in the CEMA Countries"]

[Text] In November 1979 there was an expanded meeting of the Scientific Council of the USSR Academy of Science on the overall problem of "The World Socialist System" and on the topic of "The Experience of Improved Economic Management in the CEMA Countries." The meeting was participated in by associates from the Institute of the Economy of the World Socialist System (IEMSS of the USSR Academy of Sciences), the International Scientific Research Institute on the Problems of Management (MNIIPU), the Scientific Research Finance Institute (NIFI) of the USSR Ministry of Finance, the Scientific Research Institute of Labor of the USSR State Committee for Labor, and other scientific institutions. The meeting was opened with introductory words by Corresponding Member of the USSR Academy of Sciences O. Bogomolov (IEMSS) in which the important role of the 12 July 1979 decree of the CC CPSU and USSR Council of Ministers in accomplishing the tasks of communist construction was emphasized. Great importance is being acquired by the mastery of effective forms and methods of the economic management and the generalization and use of advanced experience which has been accumulated in the fraternal socialist countries and which, in L. I. Brezhnev's words, is becoming "an increasingly important reserve for our development."

The basic directions of the development of the economic mechanism in the CEMA countries were examined in the reports by the Doctor of Economic Sciences R. Yevstigneyev (IEMSS) and the Doctor of Economic Sciences V. Terkhova (MNIIPU). In each country there is taking place the further development the principle of democratic centralism which means a strengthening of the strategic functions of the central agencies with a simultaneous expansion of the economic independence of enterprises and an increase in the creative initiative of the workers. A more active inclusion of the countries in the international division of labor is occurring. Along with the strengthening of a state monopoly of foreign trade, an expansion of the rights of economic organizations in the field of foreign economic activity is taking place here. The common nature of their tasks -- an increase in production efficiency and an improvement of the quality of work and a deepening of socialist economic integration -- is objectively leading to the formation of similar features in the economic mechanisms of the different socialist countries. The tendency toward a coming together of the economic mechanisms of the CEMA countries is creating favorable conditions not only for the use of collective experience of the economic management, but also for the formation of a more effective mechanism of socialist economic integration.

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The address by the Doctor of Economic Sciences S. Kamenitser (MNIIPU) was devoted to the problems of improving the organizational structures of management. The main tendency in the development of the organizational structure of management is a consolidation of the basic cost accounting elements, a reduction of multi-levels in the managerial hierarchy, and the transformation of management into a special purpose program system.

In the opinion of the Candidate in Economic Sciences M. Deryabina (IEMSS) the preconditions are being created in the European CEMA countries for changing the principles of the functioning of the economic organizations in the direction of expanding their rights. Large production management systems are now being formed. In addition, the role of small enterprises is increasing -- they are increasingly being regarded as the satellites of large production management complexes which are capable of fulfilling the functions of providing production and the population with a large assortment of products and services.

The reports by A. Mikhlyayev and A. Labtev (IEMSS) were devoted to the problems of long term planning forecasts and of the composition of long term overall programs, and to the combination of branch and territorial planning. The unification of branch and regional aspects, A. Labtev said, is manifesting itself in practically all of the elements of the economic mechanism: in planning, organizational structures of management, material and technical supply, and others. In planning, for example, this is expressed in the development of overall programs. Positive experience has been gained in the People's Republic of Bulgaria, the Polish People's Republic, the Socialist Republic of Romania and the Czechoslovakian Socialist Republic. Consolidated economic organizations (production associations, combines, and others) are the basic element of the economy in the socialist countries. They are managed by branch agencies (ministries), but, since they are located in a definite region, they inevitably come into relationship with state, economic, and other organizations which are located in their territory. Interesting experience in the optimal combination of branch and territorial management has been gained in the GDR.

The problems of the use of the indicators of profit and net output in the economies of the CEMA countries were discussed in the report by Candidate of Economic Sciences P. Kuligin (IEMSS). Candidate in Economic Sciences D. Butakov (NIFI) discussed the relationships between enterprises and the state budget in the CEMA countries. Beginning with the current five-year plan new tendencies in the relationships between economic organizations and the budget became clear; the centralization of net income was strengthened (this is the result of the large capital investment programs and rapidly expanding expenditures of the socialist states for the social consumption funds), the role of payments for resources has increased,

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a fee for capital has been introduced in most of the CEMA countries, and a fee for land and water is being collected in many of them. In a number of countries (the Hungarian People's Republic and the Polish People's Republic) in addition to a percentage of allotments for social insurance, enterprises pay taxes on the wage fund.

Candidate in Economic Sciences N. Vladova (Scientific Research Institute of Labor) examined the tendencies in payment for labor in the CEMA countries. Changes which are the same for all of the countries are manifesting themselves in the direction of the development of the structural elements of the payment for labor system (wage rate conditions, form of wages, bonuses). Thus, a unification is taking place in the wage rate systems right up to the complete elimination of differences in wage rates and salaries which are determined by the economic importance of branches. The differentiation in wage rates in relation to the difficulty and results of work has been increased. An increase in wage rates and salaries is closely connected with work results of enterprises and is carried out primarily from their resources, and not from budgetary appropriations. In the forms of wages a collective (team) form of payment is replacing simple piecework; in bonus payments a reorientation of material incentives not toward quantitative but qualitative indicators (an economy of material expenditures, the introduction of scientific and technical achievements, and so forth) is becoming increasingly clear. There is a substantial diversity in the methods of forming wage funds: annual planning in a directive manner (in the GDR -- on the basis of commodity output, -- in the Socialist Republic of Romania -- on the basis of net output); planning on the basis of long-term norms in relation to an increase in the conventional output (Hungarian People's Republic and Polish People's Republic); and annual ceiling on the wage fund as a share in the amount of sales (Czechoslovakian Socialist Republic); and the planning of a single wage fund (instead of a material incentives fund) as a resultant residual amount (People's Republic of Bulgaria).

An improvement of the system of managing agriculture in the CEMA countries was treated in the report of the Candidate of Economic Sciences M. Bukh (IEMSS). In the People's Republic of Bulgaria, the Hungarian People's Republic, the GDR, and the Socialist Republic of Romania practical steps have been taken to create a system of overall management within the framework of national agroindustrial complexes. Attention is being given to such problems as the creation of a more flexible system of procurement prices; the establishment of scientific substantiated accounting prices within interfarm cooperative associations; and the attainment of equivalents (through the price mechanism) in the relations between the producers of the means of production and agricultural enterprises. Credit has ceased to be solely a means of providing assistance to loss-incurring farms. As the experience of the GDR and a number of other countries shows,

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credit is efficiently granted to profitable farms which allocate substantial resources to the accumulations fund.

The central problem in improving the management of foreign economic relations which was carried out in the process of the economic reforms in most of the CEMA countries, Candidate in Economic Sciences O. Bakovetskiy (IEMSS) emphasized, was to achieve a rational combination between centralized planned management and the development of foreign trade and production enterprises. The measures which were carried out were aimed at the creation within individual countries and in the sphere of mutual cooperation of the economic, organizational, and legal preconditions for expanding direct contacts between the organizations which manage production and foreign economic relations in order to enlist industry in the planning, preparation, and realization of foreign trade operations and to increase its economic interest in their growth and efficiency.

The experience in managing output quality in the countries of the socialist commonwealth was examined in the address by L. Vasil'yeva (IEMSS), the problems of evaluating the general conditions of economic management in the socialist countries in the address by Candidate in Economic Sciences A. Golovin (IEMSS), an increase in the role of prices in the economic mechanism of the CEMA countries in the address by Candidate in Economic Sciences G. Aristov (IEMSS), and the increasing role of socialist competition in the economic mechanism of the CEMA countries in the address by Ye. Sidel'nikova (IEMSS). Candidate in Economic Sciences A. Frenkin (Laboratory for the Study of Foreign Management Experience of the Infornelektro) considered the process of the optimization of the size of the managerial apparatus and the role of branch ministries in the European CEMA countries.

The improvement of the economic mechanism which is being carried out in the European socialist countries is being interpreted in a distorted manner by bourgeois economists. A criticism of their most characteristic "conceptions" was provided in the address by T. Litvinenko (IEMSS).

All of those who spoke at the meeting of the Scientific Council emphasized the importance of studying and making use of the experience of economic management in the CEMA countries both for each of these countries and for the commonwealth as a whole.

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