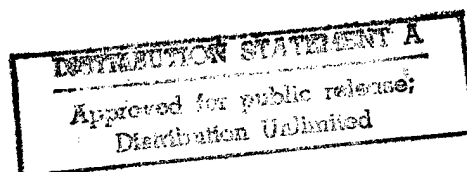


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24 August 1984



# East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

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24 August 1984

## EAST EUROPE REPORT

### ECONOMIC AND INDUSTRIAL AFFAIRS

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ROMANIANS DISCUSS ECONOMIC PROBLEMS OF CEMA COUNTRIES

Bucharest REVISTA ROMANA DE STUDII INTERNATIONALE in Romanian May-Jun 84 pp 227-240

[Article by Vasile Pilat and Daniel Daianu: "Current Development Problems of European Socialist Economies"]

[Text] World economic development, especially since the war, has confirmed and established the great potential of the socialist system of economic organization for speeding up economic and social development. This development has been marked above all by one of the most important accomplishments of the concept and practice of building a new society, socialist industrialization.

"Compressing" time by the brisk pace of their industrial development<sup>(1)</sup>, the European socialist CEMA member countries considered here have performed a veritable leap in a historically very short time as regards the quality level of their economies. Between 1950 and 1982 the volume of industrial production increased by a factor of 34 in Romania, 26 in Bulgaria, 13 in Poland and the USSR, 10 in the GDR, and 9 in Hungary and Czechoslovakia. For the socialist CEMA member countries as a whole, this factor was 14, as against only 3.8 in the developed capitalist countries and 7 in the developing countries.

At the same time, in close association with the development of industry, there has been development of the other branches of the economy (construction, agriculture, transportation and telecommunications, trade, scientific research, etc), with the result that advanced social production structures of the industrial or agroindustrial type have been created.

The profound changes in the structure of the economy have brought about radical alterations in the social structure of the countries: there has been a great increase in the degree of culture and skills of the population and a considerable improvement in the standard of living and quality of life, the gap between them and the developed countries of the world being lessened. Particular mention should be made of the achievements of exceptional scope of socialism in the areas of education, culture, and health care. These achievements are major requirements for vigorous economic growth, but at the same time are an expression of the humanist values that define socialism.

A composite indicator expressing the scope of the qualitative progress made by the economies of the European socialist CEMA member countries, one which reflects the qualitative growth of all aspects and components of economic and social reality, is represented by the increase in their share of world industrial output, from 17.8 percent in 1950 to around 33 percent in 1982 (their share of the total world population being 9.8 percent in 1982), while the share of the developed capitalist countries dropped from about three-fourths to about one-half.

It is a truism no longer requiring proof that the development of a national economy at the same time represents a process of continuous change in the conditions in which this development takes place. There is also change in the external environment in the context of and in close interrelation with which national economies operate. National economies are accordingly confronted with new problems.

I. Aside from phenomena of an occasional nature, highly important but not decisive, analysis of the data of the evolution over the last three decades of the economies of the socialist CEMA member countries reveals a number of aspects of relevance in identification of some of the major problems facing these economies, in varying degrees and different forms, of course, from country to country. These aspects will be dealt with in what follows.

First of all, in addition to the variations from country to country, the CEMA countries as a whole exhibit a tendency toward decrease in the rate of growth of all macroeconomic indicators. The average annual rate of growth of the gross national product per inhabitant dropped from 5.8 percent between 1955 and 1970 to slightly more than half this rate, 2.8 percent, over the 1970-1980 period, while in the developed capitalist countries the reduction was only one-third, from 3.6 percent to 2.4 percent.

For the 1955-1980 period as a whole the relative lag behind the developed capitalist countries in gross national product per inhabitant decreased from 1:5 to 1:3.68, but the absolute lag increased by a factor of more than 1.9 (from 4000 constant 1980 dollars to 7730 dollars). On the optimistic assumption that the gross national product per inhabitant in the two groups of countries will increase at the same rate as over the 1955-1980 period, the absolute lag will continue to grow for another 50 years and can be eliminated only in the 2070's<sup>(2)</sup>. In the case of industrial production the average annual rate of growth declined from 13.8 percent from 1951 to 1955, and 10.2 percent from 1955 to 1960, to 8.5 percent from 1961 to 1970, 4.8 percent from 1976-1980, and 2.4 percent in 1981 and 1982 (Table 1). As a result of this circumstance and of the relatively high rates reached by other countries of the world, while over the 1950-1980 period the share of the CEMA countries in world industrial production rose 10.6 percentage points (from 17.8 to 28.4 percent), over the following decade the growth was only 3.6 percent (to 32 percent), and only 1 percent between 1970 and 1982 (to 33 percent)<sup>(3)</sup>.

Secondly, comparative analysis of the countries reveals that, with the exception of the 1971-1975 period, noteworthy for the major crisis of 1973-1975, and the years 1981 and 1982, the individual rates of growth of some socialist countries (GDR, Hungary, Czechoslovakia) in both halves of the 1970's were lower than the rates achieved by many developed capitalist countries (Japan, United States, Italy, France, FRG, Finland, Netherlands, Norway). Between 1976 and 1980 growth rates lower than those of many developed capitalist countries were also recorded by the USSR and Poland<sup>(4)</sup>.

Table 1. Rate of Growth of Gross Industrial Production\*

(1) Țara	(2) Creșterea medie anuală						
	1951-1955	1956-1960	1961-1965	1966-1970	1971-1975	1976-1980	1981-1982
Bulgaria	13.7	15.9	11.7	10.3	9.1	6.0	4.6
(3) Ungaria	13.2	7.6	7.5	6.2	6.4	3.4	2.6
(4) R. D. Germană	13.8	8.7	5.8	6.5	6.5	4.9	3.9
(5) Polonia	14.8	9.7	8.4	8.3	10.4	4.7	-6.6
România	15.1	10.9	13.8	11.9	12.9	9.6	1.8
(6) U.R.S.S.	13.2	10.4	8.6	8.5	7.4	4.4	3.1
(7) Cehoslovacia	10.8	10.4	5.2	6.7	6.7	4.6	1.5
(8) TOTAL CAER:	13.6	10.2	8.5	8.2	7.6	4.8	2.4

\*"Statisticheskiy yezhegodnik stran-chlenov SEV" [Statistical Yearbook of CEMA Member Countries], 1983, Moscow, 1983, page 55. Calculation of growth over the 1951-1955 and 1956-1950 periods is based on growth figures as given in "Narodnoye Khozyaystvo Stran-Chlenov SEV" [National Economy of CEMA Member Countries], 1982, Moscow, 1983, p. 14. The total for the CEMA countries has been determined by the authors on the basis of data in the referenced publications and in the statistical yearbooks of the countries.

Key:

1. Country
2. Average annual growth
3. Hungary
4. German Democratic Republic
5. Poland
6. USSR
7. Czechoslovakia
8. CEMA TOTAL

The third factor to be noted is the fact that the high rates of industrial development of some socialist countries, especially in the 1970's, was based to a by no means negligible extent on substantial credit and loans obtained from private and governmental institutions in the West and from various international bodies.

As a result of a whole array of internal and external factors (unsatisfactory efficiency in use of these borrowed resources, the rise of interest

rates, the crisis phenomena and world economic processes, etc), the considerable size of the foreign debt imposed a heavy burden on the development potential of these countries.

Fourthly, along with decrease in the share of the countries analyzed in world exports, from 10.9 percent in 1965 to 7.9 percent in 1980<sup>(5)</sup>, the CEMA member countries as a whole exhibit, after 1970 in particular, a deterioration of the structure of trade with the developed capitalist countries: on the one hand, a small and declining share of exports of machinery, equipment, and means of transportation to these countries and a growing proportion of exports of fuels and raw and intermediate materials, and on the other, the share of imports of machinery and equipment from the developed capitalist countries remaining at the same high levels and the volume of these imports in terms of value continuing to increase. There has at the same time been an upsurge in imports of food products and raw materials.

Hence it is natural for the socialist countries to have searched for the factors generating these developments and the connection between them and the economic structures erected (economic branch and production structure, technical and technological, reproduction structure, and so forth).

II. The current social production structures of the socialist CEMA member countries have been formed essentially on the basis and within the framework of the development model advocated by the socialist industrialization concept adopted in this geopolitical area. Owing to an entire array of factors, primarily the international political and economic context and the low level of development of the majority of these countries, this concept has represented and has promoted a model of development based on:

(a) a structural model of the integral type from the viewpoint of incorporation of material production; this model has in effect excluded the international division of labor as factor in growth (primarily in the case of the small and medium-sized countries);

(b) a reproduction model of the extensive type based on the law of priority development of production of the means of production, and within the framework of the latter, development of the first subsector, producer of means of production for production of means of production. This law merely reflects the requirements of the process of basic industrialization, which by definition presupposes reproduction of the extensive type. Especially under conditions in which effort is made to achieve very high growth rates to erase the historic lag behind the developed economies, the latter entails an absolute preponderance of net investments and a negligible share of replacement investments, with the amortization fund diverted from its true object and used for investment in new projects;

(c) a model economic mechanism based on directive centralized planning of the allocation and utilization of resources.



The process of extensive development over the period of basic industrialization dominated by quantitative needs has led to the prevalence of a quantitative viewpoint of economic processes. The quantitative relationships among branches, the high rates of growth and percentage of the population employed in industry and the share of industry in the national income, the rate of growth and share of heavy industry branches, and the high levels of production per inhabitant for certain basic industrial products (steel, cement, etc) have been considered to be the most significant indexes of the quality of economic development.

Inasmuch as the stage of basic industrialization had not yet been outstripped and in view of the political and economic conditions of the post-war period, the model of development offered by the "classic" theory of socialist industrialization was found to be suited to the objective of rapidly (in comparison to historical experience) basing the labor of the nation on mechanization and fashioning a powerful industry. Moreover, the quantitative outlook, evaluation of the quality of social production structure by means of the indicators referred to, finds its historical justification in the fact that these indicators not only expressed the requirements of the stage but at the same time reflected the great progressive transformations in the macrostructure of the economy, ones which led the socialist countries analyzed into a new and higher stage of development of their production forces.

But along with completion of the process of basic industrialization, marked by excess of the share of population employed in industry and construction over that employed in agriculture, exhaustion of the effective surplus of labor, and especially the low level (below unity) of intensity of macrostructural changes, ones which shifted to the level of the branches and subsidiary branches, and along with the radical change in the "external environment" expressed concretely in elimination of the state of isolation of the socialist economies characterizing the cold war period, the gradually widening participation by these countries in world trade, the evolution of competitive branches and production in the developing countries, the ever faster pace of what has been termed the scientific and technical revolution, and the "structural crisis" of the developed economies under the impact of the scientific and technical revolution and of the energy crisis, there has been a radical change in the conditions of operation and development of the socialist economies. The requirements of adaptation to the new domestic and foreign conditions, the needs for transition to development of the intensive type, require rethinking and revision of all the components of the development model and abandonment of the quantitative outlook.

III. The European socialist countries completed basic industrialization at different times, depending on the levels of development from which they started: the GDR and Czechoslovakia in the 1950's, the USSR and Hungary in the mid-1960's, Poland and Bulgaria at the end of the 1960's and beginning of the 1970's, and Romania in the mid-1970's. The effort to carry out

economic reforms, to improve the economic mechanism, begun in the mid-1960's, represented not just an indirect reflection of the entry of these countries into a new stage of their economic development, but an awareness at the political level of the need for redesigning the model of development in accordance with the requirements of this new stage.

Despite the important steps taken in this regard and beyond the substantial differences from country to country, the development of the socialist countries proceeded essentially on the basis of the same model (only in part is Hungary an exception). The extensive nature, which by its very nature excludes increase in the efficiency of social production, persisted. The causes vary, while the forms which they assume and the weight and intensity of their action differ from one country to another. Initially ideological and political in nature, they have been transformed into material factors which have become components modeling the objective economic mechanism.

The principal component of this mechanism, investment policy, but particularly the mechanism of investment application (through centralized allocation of resources), has continued to promote the absolute priority of large-scale net investments, of increasing the physical volume of fixed capital<sup>(6)</sup>, despite the fact that under the new conditions the need arose (heightened by the rapid obsolescence of production equipment and technologies) for shifting to a policy and accordingly a mechanism of investment application ensuring not so much quantitative growth as especially improvement in the quality of production factors, renovation and modernization of active fixed capital and technologies.

This investment orientation practice has had numerous consequences. We note several of them, which have been dealt with in different ways in the literature.

First of all there has been deterioration of the quality structure of fixed capital<sup>(7)</sup>; as a result of the inadequate rates of replacement, the total mass (in physical terms) of the means of labor in service includes not only a high percentage of obsolete capital, something which obviously affects the efficiency levels, but also of physically worn capital determining absolute decrease in efficiency owing to the impact on the quality and costs of production.

This dynamic of the quality structure of (active) fixed capital has led to hypertrophy of the repair sector<sup>(8)</sup>. Repeated capital repair and routine maintenance became "a necessary method, and even the only possible one, of reproducing the fleet of equipment"<sup>(9)</sup>. Because of the scope which it assumed, the functions of the sector changed, coming partly to replace mechanical engineering in reproduction of the means of labor, but obsolete means of labor. The negative effects of this phenomenon on the efficiency of social production are amplified by the very wide scope of the material and human resources which it engages<sup>(10)</sup>.

The extensive investment practices lead to massive increase in the volume of means of labor in physical terms, the replacement and modernization of which exceeds the capabilities of mechanical engineering, whose own fleet of machinery has its quality affected by the mode of reproduction, despite the fact that this branch has assumed enormous proportions (mechanical engineering in the USSR employs around 20 million persons and uses more metal cutting machine tools and molding and forging equipment than that of the United States, Japan, and the FRG combined)<sup>(11)</sup>. In identifying this phenomenon, D. Palterovich, a specialist of the State Planning Committee of the USSR, points out that a situation has been created in which "increase in the efficiency of production is hampered not by a shortage of equipment but by too great an amount of it"<sup>(12)</sup>.

The quantitative increase in the mass of means of labor far exceeds the level justifiable from the economic viewpoint, and has simultaneously entailed the engagement in production of a corresponding mass of manpower far exceeding the level of balance<sup>(13)</sup>. Extremely high employment in organized social production of working age population and retired persons has been reached<sup>(14)</sup>. This circumstance has led, on the one hand, to the occurrence of an increasingly keenly felt shortage of manpower<sup>(15)</sup>, and on the other to relative impairment of the qualitative structure of manpower employed primarily in industry, in the sense of persistence of a low level of qualitative uniformity (from the viewpoint of skills, behavior, etc). Both of these processes exert important and complex economic, social, cultural, demographic, and other consequences the aggregate effect of which is impairment of the quality of operation of the production organism. Particular mention must be made of two of these consequences. One of them, deterioration of the behavior of the individual economic subject, has generated the most serious efforts by the management elements to strengthen labor discipline, eliminate absenteeism, reduce the heavy personnel turnover among enterprises, and so forth. The second, the lack of relative qualitative uniformity of the means of labor referred to above, affects the quality of integration of these means into the production process. Only part of the production features of high-quality resources can be utilized, and the influence of low-quality resources on production volume and quality is accordingly greater than their share of the total volume of resources. Hence labor productivity increases more slowly than the rate of provision of equipment for labor and thus lowers the efficiency of social labor as a whole (live and embodied).

The enormous volume of means of labor that must be replaced, together with the preponderance of net investments, generates and perpetuates in the economy a state of chronic "shortage"<sup>(16)</sup> of means of production<sup>(17)</sup>. The shortage of means of production has many serious consequences for the entire mechanism of reproduction, the quantitative and qualitative structure of social production. It causes incomplete use of existing production facilities, great delays in finalization of investment projects, the formation of surplus stocks, increase in costs and/or lowering of product quality, and so forth, all of which aggravate the shortage situation. But the most serious consequence of the shortage situation is the slowing down of

technical progress. The deficit condition represents a veritable "nutrient medium" for the inertial tendency of a producer to produce at the technical level already adopted. "The greater the shortage," writes J. Kornai, "the weaker is adaptation of demand to supply." The purchaser is dependent on the producer, being forced to adapt himself to demand. This fact "accentuates the quantitative growth of production by weakening the orientation toward qualitative development"<sup>(18)</sup>. The deficit, stresses S. Heineman, "eliminates any incentives for the producer to take consumer interests into account, to overcome the force of inertia, and this primarily in production of the means of production"<sup>(19)</sup>. It is precisely the chronic nature of the deficit that has led to the circumstance that "the principal problem of the CEMA member countries is represented by insufficiently rapid introduction of the achievements of science and technology. To be precise, the problem lies not so much in elaboration of fundamentally new production techniques and technologies as especially in the introduction of already existing achievements of science and technology into production"<sup>(20)</sup>. The slow pace of technical and technological progress under conditions of more rapid growth of social needs (heavily influenced by the dynamics of technical and scientific progress of the most highly developed countries) slows down transition to development of the intensive type, perpetuates the shortage situation, leads to high material costs per unit of newly created international value, prevents radical growth of the efficiency of social production<sup>(21)</sup>, and thwarts the possibility of reducing the absolute and even relative lags behind the most highly developed countries.

Lastly, the shortage of means of production maintaining the investment famine in the industry producing these means reduces the potential for development of the other branches and spheres of social production. The result is the substantial lag, in relation to the requirements of balanced and efficient development, of agriculture and the production infrastructure of the industrial branches producing consumer goods and services intended for non-productive consumption. This situation is observed in varying degrees in the majority of the socialist countries under discussion; it has been extensively analyzed in numerous official documents of these countries and in the economic literature and has become the object of special government measures and programs.

All the foregoing phenomena form a complex of material interrelations which make up an objective resource allocation mechanism which preserves the extensive mode of reproduction and thus declining efficiency of social production. This complex of material interrelations represents one of the reasons why awareness of the need for qualitative development, for example, by righting structural imbalances in the economy, accelerating technical progress, lowering material production costs, increasing efficiency in resource utilization, etc, and embodiment of the qualitative aspect in economic plans and programs in general has not been able to ensure solution of this problem facing the socialist economies.

The main cause, however, lies in perpetuation of the "traditional" development model in practical management and conduct of economic processes, and above all its decisive component, the economic mechanism model. In its

entirety and throughout its subsystems, the system of centralized allocation of investment resources, the system of centralized planning of the activities of every economic unit, with its derivatives (the system of plan indicators and that of evaluating their activities), the system of redistribution of the results of the activities of the units, branches, and sectors of the national economy (primarily through the system of prices, all of them firm and established at the central level, and the profit distribution system), and the system of other sources of material incentives and thus of wages and compensation, etc<sup>(22)</sup>, this model has simulated a system of implicitly behavioral interests of economic subjects not in keeping with the interests of intensive development, ones which have generated the current inefficient structures of the production organism. The need for improving the quality of the social production system, ever more keenly felt as a result of exhaustion of the extensive factors of growth and the qualitative changes taking place in the external environment (the restructuring processes in the developed economies, above all, and in the world economy under the influence of the scientific and technical revolution, the energy crisis, the industrial progress made by some of the developing economies, etc, with their many and profound implications), calls for radical reorientation of the strategy of development of the economy in the direction of maximum utilization of the intensive factors of growth. This presupposes breaking up the system of material and interest interrelations that has been built up, carrying out radical restructuring of social production, including abandonment of the old development model and the quantitative outlook which generated it, the elaboration and firm promotion in economic practice of a development model which is above all a new economic mechanism suited to the new realities.

Despite the fact that Romania has completed the process of basic industrialization and has faced later than the other socialist countries the problems of transition to intensive development, Comrade Nicolae Ceausescu, general secretary of the Romanian Communist Party, evincing profound understanding of the nature of the objective processes and trends in economic development during the new stage, has made an analysis in an exemplary critical, authentic, and revolutionary spirit of the content and the implications of the mechanism of the extensive development period and has formulated clearly the objective necessity of "smashing the old mechanism" so as to unleash the creative energies of the people as the only and the fundamental solution to the problem of guiding the Romanian economy onto the path of intensive development<sup>(23)</sup>.

IV. In the light of the foregoing, certain directions of development emerge from the conceptual viewpoint and from that of practical action for overcoming the problems associated with ensuring improvement in the quality of the production organism of the socialist economies.

1. As regards the model of the economic mechanism, the need for having the economic mechanism more greatly favor assertion of objective economic laws is becoming increasingly obvious and more keenly felt. It is a question above all of the law of value, the requirements of which must also be met

by utilization of such economic laws of socialism and the law of proportional planned development, the law of remuneration according to the quantity and quality of work, etc.

As the social division of labor deepens, as the sphere of its coverage of commodity and monetary relationships broadens, the role of the law of value in assuring equivalence of the exchange (including the placing of relationships between economic agents on an equitable, economic basis) grows rather than diminishes. Coupled with it is increase in the role of the market, conceived not as a simple sphere of exchange of goods but as a mechanism of revealing the value of goods, including the dynamics of social needs to which production should conform, and of timely and efficient regulation of the structure of supply of service values as a function of these dynamics. The optimum dynamic equilibrium of the economy is provided by the optimum equilibrium between the dynamics of the social needs structure and the dynamics of production structure. The market, with all its inadequacies, remains an efficient mechanism for furnishing throughout the information system relevant information on both terms, thereby contributing to better allocation of resources. At the same time, the market, assuming autonomy of economic agents in decision making, including their self-management and self-financing, and confrontation and competition among producers in their relationships with purchasers, encourages behavior promoting the highest possible productivity, and thus promotion of technical progress and lowering of production costs. It stimulates the spirit of initiative and enterprise.

We know, however, that regulation of production through the "free market" mechanism, by virtue of its very nature as a process of spontaneous ex post self-adjustment, inevitably generates serious negative consequences and in effect excludes the possibility of deliberate orientation of structural changes. We are just as well aware that the system of management through directive centralized planning, with an analytical breakdown of plan targets by executing enterprises, is unsuitable for development of the intensive type<sup>(24)</sup>. Hence utilization of the powers of the market presupposes modifying the size and role of the market within the framework of the economic mechanism, along with redesign of the content and functions of planning, so that the operations of these 2 social production adjustment mechanisms will not become incompatible but will complement and especially will correct each other.

This means in effect construction of a mechanism flexibly combining decentralization, decision making autonomy of enterprises in all problems connected with their activities, on the basis of the principles of self-management, self-administration, and self-financing, with a system of direct (through the plan) and indirect adoption (through the system of economic resources, at the central (branch, society) level of decisions affecting the general interests of the branch or the economy as a whole and going beyond the sphere of specific interests of economic units.

An important arena in which the possibly contradictory interests of the enterprises encounter general interests is that of price formation. In order

for it to perform its economic functions, from the viewpoint of transmission of information, allocation of resources, coordinating supply with solvent demand, etc, owing to and by means of which the market can function as a mechanism, it is necessary to abandon the system of centrally established firm prices (with the exception of absolutely necessary goods such as food-stuffs). For this purpose the application of maximum prices that can be adjusted downward, gradually and at first selectively oriented toward the level of world prices, can simultaneously ensure both stimulation of competition among producers and avoidance of uncontrolled price rises. Moreover, prices could in this way become an instrument of international selection and specialization.

2. As regards the reproduction model, historical experience has shown that priority development at a rapid pace of production of the means of production is not a general law valid in any stage of industrial economic development. It has possessed and does possess this attribute in the case of economies with a structure of the integrated type, during the stage of basic industrialization, which involves reproduction of the extensive type.

In small and medium-sized countries the share and rate of development of particular branches of industry depend on the efficiency which can be ensured by integration into the world division of labor, and accordingly by the comparative advantages that can be afforded in international trade by one or another of the many alternative versions of utilization of the production factors available to the national economy. The efficiency of foreign economic relations is indissolubly and causally linked to reproduction of the intensive type.

3. As regards the production structure model, with extensive diversification of production and the technical level of production rising at an ever faster pace, countries which are small and medium-sized from the viewpoint of human (including technical and scientific) potential and which have a wide range of natural resources but a relatively restricted domestic market cannot develop production structures of the integrated type. Selective development, including international specialization, is not merely a desideratum for such countries but is an urgent necessity, a basic requirement for their economic progress.

Selective development and international specialization do not, of course, mean unilateral development, just as multilateral industrial development does not mean autarchic development exclusively to satisfy all domestic needs. One of the most important growth factors for any national economy, regardless of the production structure type (integrated or selective), but especially for small and medium-sized countries, is represented precisely by the open nature of the economy, by foreign economic relations offering the possibility of utilization of the comparative advantages deriving from specialization. For a number of socialist countries this presupposes changes of proportion in the production structures formed, restriction or abandonment of some types of production and vigorous development of the ones selected. This process entails substantial costs as well as risks (owing to the "fluidity" of the real world economy). But in a situation in

which all the developed countries of the world are engaged in a veritable "adaptation race," in a broad restructuring process, inertia, indecision, postponement of the planning and building of new structures in keeping with the particular conditions of the country and the requirements of efficient integration into the world division of labor, results not only in relative backwardness in relation to the dynamics of production forces at the world level, but also in grave and growing deterioration of the "health" of the economy.

The problems of branch structure, in both integrated and selective economies, includes elimination, as an essential condition for transition to intensive development, of the imbalances that have arisen as regards the level of development of the branches making up the macrostructure of the economy, above all the imbalance of industry and agriculture, the latter and the productive infrastructure, the commodity production sphere and the services sphere, etc. This presupposes redistribution of resources in favor of the backward branches, a redistribution favored by the formation of selective production structures.

V. The analytical elaboration of a new model of development, a new economic mechanism, and its promotion in practice is, however, a particularly complex process difficult to accomplish. It is so first of all because at the theoretical level the old concepts of economic processes persist for some time, both as a result of inadequate analysis by economic science of the objective mechanisms of optimum development of socialist economy, in a state in which the qualitative factors have become essential and under the conditions of necessarily open economies actively integrated into the world division of labor, and by virtue of the inertia inherent in systems of ideas that have become paradigms. Secondly, the promotion of a new model in practice presupposes surmounting the inertia of the structures already formed (productive, organizational, professional and occupational) and recasting the economic behavior by restructuring the economic interest systems of the economic agents. Thirdly, there is the force of the restrictions imposed by the "external environment," that is, the extent of the influence of crisis phenomena in the world economy on the national economy, the status and progress of political relations, and so forth. Fourthly and lastly, there are the substantial costs, economic and social, involved in restructuring within the production apparatus and in the system of interests.

The problem of overcoming these difficulties, of different magnitude and intensity in different countries, of elaborating and implementing a new model of development, is a matter of deep concern for the political factors of all national economies. This concern has been expressed in a number of measures the content of which reflects the particular concrete, historical conditions of the respective countries from all the viewpoints dealt with.

VI. It is obvious that the method of approaching and solving the problems facing the economies of the European socialist countries depends directly on the size and efficiency of their foreign economic relations. Thus it should be pointed out that, from the viewpoint of international economic



relations the increasingly active participation by the European socialist countries in world trade and international economic cooperation over the last 2 decades appears to be an irreversible process, despite setbacks of longer or shorter duration imposed by unfavorable circumstances. This process is determined and sustained by powerful and perennial mutual interests, firm economic, financial, and technological connections between the economies of these countries and the other developed economies.

In our opinion, in view of the general and long-term problems of development of the socialist economies, the natural desire to reduce vulnerability, the excessive amount of foreign debt in some cases, unsuitable trade structure, or a certain amount of technological dependence, should not lead to isolation from the rest of the world, to "confinement" of foreign economic relations (within the framework of CEMA). The path to be followed should be based on broadening and diversification of foreign economic relations under the conditions of and apace with substantial increase in the efficiency of national production. Reality indicates, moreover, that, despite rather difficult situations in the world economy, also fostered by relative deterioration of the international political climate, the European socialist countries are steadily developing economic relations with other socialist countries not members of CEMA, with developing countries, and with the advanced capitalist countries. The latter are themselves interested in broadening and diversifying commercial and cooperation relations with the socialist countries. The widest possible use of the potential for development of these relations unquestionably presents mutual advantages, and not merely from the strictly economic viewpoint. It simultaneously represents an essential instrument for ensuring confidence and stability from the viewpoint of political relations.

At the same time, it should be stressed that improvement in collaboration and cooperation among the CEMA socialist countries can and should be an especially important factor in solution by common effort of the problems with which these countries are faced. As Comrade Nicolae Ceausescu has pointed out on a number of occasions, the socialist countries in effect have available to them all the conditions needed for ensuring through wide cooperation meeting of energy and raw materials needs, solution of many of the most complex technical problems, promotion of specialization and cooperation in production, and broadening of mutual trade.

Multilateral development of the foreign economic relations of the socialist countries can also be fostered by more active participation in the activities of international economic organizations and the International Monetary Fund and the World Bank. This would also have a favorable effect on participation by the socialist countries in discussion of all the problems confronting the world community. In the wider field of international relations as a whole, efforts exerted by the European socialist countries toward elaboration and implementation of a new model of development suited to new needs can lead to reinforcement of the sociopolitical, economic, and ideological image of these countries throughout the world and can open up new prospects for the dynamics of international relations.

# FOOTNOTES

1. The average annual rate of growth of industrial production for the 1951-1981 period as a whole was 8.6 percent as against 4.5 percent in the developed capitalist countries and 6.7 percent in the developing countries (see "Narodnoye Khozyaystvo SSSR, 1922-1982" [National Economy of the USSR, 1922-1982], Moscow, 1982, p 90).
2. Extrapolated on the basis of the gross national product levels per inhabitant determined by the World Bank for 1955 and 1980 (see "World Development Report, WDR 1982," Washington, DC, 1982, p 22).
3. "Narodnoye Khozyaystvo SSSR, 1922-1982," Moscow, 1983; *ibid.*, 1961-1981; also the national statistical yearbooks of the CEMA countries and the materials of the UN Economic Commission on Europe.
4. *Ibid.*
5. "World Development Report, 1982," p 26.
6. See "Problemy narodnokhozyaystvennogo optimuma" [Problems of National Economic Optimization], Novosibirsk, 1973, p 226-228; E. Honecker, "Aus dem Bericht des Politburos auf die 5 Tagung des Z.K. der SED" [From the Politburo Report to the 5th Session of the Central Committee of the Socialist Unity Party of Germany], Berlin, 1977, p 20; "Oekonomische Effektivitaet der gesellschaftlichen Produktion im entwickelten Sozialismus" [Economic Efficiency of Social Production Under Developed Socialism], Akademie Verlag, Berlin, 1980, pp 194-196; Janos Kornai, A. Hiany, Budapest, 1980; etc. In the USSR, for example, in industry as a whole about 2 to 2.5 percent of the active fixed capital is withdrawn from service each year, while the annual growth of this capital is 4 to 5 times greater.

In the mechanical engineering and metalworking branch the ratio of active means of labor taken out of use to newly commissioned means is more than 1 to 5-5.6, a phenomenon characteristic of the entire recent period of 15 to 20 years. The replacement rate is 3 to 4 times lower than that assumed by the average rated service (amortization) life, and the replacement requirement in mechanical engineering is 5-6 times higher than the actual replacements (see "Narodnoye Khozyaystvo SSSR" for 1965-1980). In the developed capitalist countries the annual replacement rate is generally 4-5 times higher, and in some periods and branches has risen to 20 percent (in Japan, for example).

7. "Voprosy Ekonomiki" [Questions of Economics], No. 10, 1979, p 46; "Oekonomische Effektivitaet...", p 194; E. Honecker, *op. cit.*, p 20.
8. Voprosy Ekonomiki, No. 3, 1978, pp 37-38.
9. "Problemy Narodnokhozyaystvennogo Optimuma," p 236.

10. In the USSR, about 45 percent of the fleet of machine tools of the country and approximately 12 percent of the total number of industrial workers (according to some estimates, as many as 16 percent) are employed in the repair sector. This sector accounts for about 20 percent of total metal consumption, while the total expenses for major and routine repair in it amount annually to around 40 billion rubles, that is, almost twice as much as the total investments in the branches of industry producing consumer goods during the entire 1976-1980 Five-Year Plan (see "EKO," No. 5, 1980, p 44; "Voprosy Ekonomiki" [Questions of Economics], No. 2, 1978, p 39; No. 7, 1979, p 36; No. 10, 1979, p 47). In the GDR the share of workers employed in the total number of industrial workers rose from 14.8 percent in 1965 to 15.8 percent in 1971, 16.6 percent in 1977, etc (see "Statistisches Jahrbuch der DDR" [Statistical Yearbook of the GDR] for the respective years).
- 11 "EKO," No. 5, 1980, p 45.
- 12 "Planovoye Khozyaystvo" [Planned Economy], No. 10, 1979, p 112.
- 13 The balance level corresponds to the level of effective release of manpower from agriculture and the household economy (women) as a result of its replacement by means of labor and respectively by social services and paid services. The engagement in industrial activities and construction far above the effective release level, necessitated by the scope of the extensive development plans of industry, was made possible by the fact that manpower was generally cheap and abundant in the majority of the socialist countries. Exhaustion of the "surplus" manpower (from agriculture) did not entail corresponding change in the cost of labor, this being determined by the increasing influx of women into socially organized production (see the collective monograph by a group of economists of several socialist countries, "Effektivnost' sotsialisticheskogo proizvodstva i khozyaystvennyy mekhanizm" [The Effectiveness of Social Production and the Economic Mechanism], Moscow, 1979).
- 14 Above all, women almost in their entirety were involved; the share of total worker personnel amounts to 51.5 percent in the USSR, 50.6 percent in the GDR, 48.5 percent in Bulgaria, and 44.5 percent in Hungary ("Statisticheskii Yezhegodnik Stran Chlenov SEV" [Statistical Yearbook of the CEMA Member Countries], 1980, p 412-413). Women account for the bulk of the labor force in agriculture. "Planovoye Khozyaystvo," No. 5, 1980, p 105; V. G. Kostakov, "Prognoz Zanyatosti Naseleniya" [A Forecast of Population Employment], Moscow, 1979, p 11. In 1975, for example, about 43 percent of the number of retirees were employed in production ("Effektivnost' Proizvodstva i Khozyaystvennyy Mekhanizm," Moscow, 1979, p 35). In the same year, 4.4 million retirees, 13 percent of production personnel employed in industry, were working (M. S. Lantev, "Sotsial'noye Obespecheniye v SSSR" [Social Security in the USSR], Moscow, 1976, p 137).

- 15 Recorded in many official documents and by many economists in a number of socialist countries, the manpower shortage in European socialist CEMA member countries (GDR, USSR, Bulgaria, Hungary, and Poland), its dimensions, and its serious implications have been subjected to broad analysis in the the substantial collective monograph "Effektivnost' Sotsialisticheskogo Proizvodstva i Khozyaystvennyy Mekhanizm," Moscow, 1979).
- 16 We enclose the concept of shortage in quotation markets because in this case it does not express an absolute insufficiency in relation to to the labor force available to the national economy. From this viewpoint there is even a quantitative excess. It is a question of a lack of potential for reproduction of the existing mass of means of production, on the one hand, and for production of the mass of means necessary for production in new fields and in lagging sectors.
- 17 The problem of the deficit, its implications, and the mechanism of its production and reproduction is analyzed in works by the Soviets I. M. Ivanov (Novosibirsk), S. Heineman (Moscow), and others, but especially in the work by Janos Kornai, "The Deficit," published both in Hungarian and in English.
- 18 J. Kornai, A. Hiany, pp 136-139.
- 19 See "EKO," No 5, 1980, pp 39-40; "Planovoye Khozyaystvo," No 9, 1979, p 102.
- 20 "Effektivnost' Sotsialisticheskogo Proizvodstva i Khozyaystvennyy Mekhanizm," Moscow, 1979, p 284.
- 21 The impact of the slow pace of technical progress on material production expenses is enormous. Thus energy consumption per comparable gross national product unit was in 1978 on the average for CEMA twice as high as the average for the developed capitalist countries, 2.5 times higher than in Austria or the FRG, and 3 times higher than in France. The USSR, Czechoslovakia, and Bulgaria had consumptions above the CEMA average, while an advanced country such as the GDR consumed more than twice as much as the FRG or Austria. Metal consumption is also approximately twice as great. If, for example, the USSR had achieved the same coefficient of conversion of steel to rolled goods as France (in 1982), in the same production of steel it would obtain an output 25 percent higher, or conversely, the same output of rolled goods would require a correspondingly smaller output of steel, this being equivalent to about 35 million tons of steel at the 1982 level. This would represent a saving of the investments needed for obtaining about 260 million tons of iron ore, creation of the respective production facilities in iron and steel working, corresponding increase in energy and fuel production, production in mechanical engineering of the equipment needed for all these investments, etc.

- 22 With the partial exception of Hungary, the content of the economic mechanisms in operation that effectively govern in practice the relationships between economic units and the behavior of individuals as economic subjects are basically similar in all the socialist countries under discussion.
- 23 Nicolae Ceausescu, "Romania pe drumul construirii societatii socialiste multilateral dezvoltate" [Romania on the Way to Construction of a Comprehensively Developed Socialist Society], Bucharest, Editura Politica, Vol. 15, p 526.
- 24 Both as a result of the inevitable errors in determining the structure of social needs and the dimensions of their components, or of favoring manifestations of deadening bureaucratism and of disruptive, harmful voluntarism, and especially because of the fact that eliminating the market hampers economic initiative, rendering economic structures rigid eliminates the possibility of modeling the specific interests of economic agents in accordance with the demands for achievement of maximum macroeconomic economic efficiency, as well as the possibility of using them as instruments in reaching this efficiency, generates distortions in efficient allocation of resources and accordingly in the production structures, and as a result of all this eliminates the conduct of the processes of "macroeconomic rationality" which it was intended to serve.

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CSO: 2700/223

CEMA SUMMIT: MODEST GAINS, INTEGRATION MECHANISM UNCHANGED

West Berlin DIW WOCHENBERICHT in German No 29, 19 Jul 84 pp 343-348

[Text] After almost 4 years of preparation, the "Economic Conference of the CEMA Member Countries at the Highest Level" finally took place in Moscow from 12 through 14 June last. Looking at the documents published,<sup>1</sup> the outcome of this conference may be summarized in three points. First: The cooperation of the small European CEMA economies with the Soviet Union is to be intensified in several fields; this applies in particular to energy and raw materials, agriculture and food, science and research. Second: This intensification of cooperation is not to proceed at the expense of relations with third countries. In fact, by reason of economic and political interests, the CEMA countries intend to involve themselves intensively in the world economic division of labor and, within the framework of their potentials, contribute to the "recovery of international relations in the field of economics." Third: The basic features of CEMA cooperation will not change in the foreseeable future; in the case of conflict, they guarantee the priority of national over community interests.

The Genesis of the 1984 Summit Conference

The Romanian head of government first proposed the convocation of a summit conference at the 34th Council Meeting in summer 1980.<sup>2</sup> The conference was to be held in the fall of 1980 or, latest, in spring 1981. In addition a regular 5year rotation was to be arranged for future summit conferences. Romanian interest was concentrated on larger oil imports from the USSR--at preferential prices<sup>3</sup>--, also on higher contract prices and other economic incentives in the reciprocal trade in farm produce and food, and lastly on the greater involvement of Romanian production capacities in CEMA industrial cooperation. At the 26th CPSU Congress in February 1981, Brezhnev responded as follows: "Life itself calls on us to complement the coordination of plans by the synchronization of our entire economic policy. Also on the agenda are issues such as the structural adjustment of economic mechanism, the ongoing expansion of direct links between the ministries, associations

and enterprises involved in cooperation, and the establishment of joint companies. Possible, moreover, are other methods for combining our efforts and resources. As you see, comrades, many new and major issues arise here. It might be appropriate for the senior representatives of the fraternal countries to collectively discuss them in the very near future."<sup>4</sup>

The latest Soviet writings on integration call on the CEMA countries to coordinate their national structural and investment policies and to harmonize their measures for the modernization of the national economic mechanisms.<sup>5</sup> Against the background of earlier CEMA cooperation, this would represent an economic (and political) challenge to the governments involved. Up to now this cooperation had largely concentrated on bilateral negotiations about reciprocal exchanges of goods, and to a certain extent also on the bilateral exchange of services, technical knowledge and capital ("investment participations"). Synchronization and coordination would restrict national sovereignty with respect to reforms, because the methods and efficacy of direct central planning and control of economic processes differ from one country to the next.

It is not surprising, therefore, that the various CEMA member countries needed a lot of time to decide what attitude to adopt at the impending summit. The SED Politburo, for example, did not "approve the documents coordinated in preparation of the CEMA Member Countries' Economic Conference at the Highest Level" until end November 1983.<sup>6</sup> Finally the serious illness of now deceased Soviet party chief Andropov postponed the convocation of the conference for the second time.

#### History of CEMA Economic Summits

Article VI of the CEMA charter which took effect in 1960--12 years after the organization's establishment--and was revised in 1962 and 1974, provides the following: "The Council Meeting is the supreme organ of the Council for Economic Mutual Aid. ... The Council Meeting is made up of the delegations of all Council member countries. The government of each country decides the composition of the delegation of the respective country." Thirty-eight sessions of the Council Meeting were held from April 1949 through June 1984. With one exception, they were carried on at heads of government level. The exception was the 23rd (extraordinary) Council Meeting (23-26 April 1969)--the penultimate CEMA summit--, directed by the general secretaries of the member countries' ruling communist parties. By contrast, all other earlier meetings of party chiefs--1958 (20-23 May), 1962 (6-7 June), 1963 (24-26 July), 1966 (7 July) and 1984 (12-14 June)--occurred outside formal CEMA charter provisions. Disregarding the 1958 and 1966 conferences, the summits always ended with a Council Meeting: In 1962 with the 16th Council Meeting (7 June), 1963 with the 18th Council Meeting (26-26 July) and 1984 with the 38th (extraordinary) Council Meeting (14 June).

Outcome of the 1984 Summit Conference: More Exports to the Soviet Union...

The problems of community-internal energy and raw materials supplies were evidently one of the key issues at the conference. To relieve the Soviet energy and raw materials balance, the other CEMA countries accepted three different obligations: (1) Their own resources (including imports from third countries) are to be used to the fullest, and the national economies converted to thrifty and rational raw materials use. (2) The structure of energy deliveries from the USSR is to change in the medium range (replacement of oil by natural gas; no decision has apparently been made yet on the construction of the new gas line envisioned in the Soviet Union's long-range energy program). (3) To safeguard energy and raw materials imports, "high-quality foods and industrial consumer goods, some types of construction materials, machines and equipment at world technical standards" will have to be supplied to the Soviet Union--actually more than originally proposed. It is reported that the USSR has agreed always to charge world market prices for its deliveries when these prices fall below CEMA clearing prices. All in all, this outcome means that the Soviet market will be more demanding and difficult for the smaller CEMA countries, and that the large Soviet export surplus with these countries is to be gradually diminished.

For the CEMA intra-Bloc trade this will probably mean that the USSR's share in the exports of the smaller CEMA (6) countries will continue to rise. As it is, it increased by 2 percent to more than 38 percent from 1970 through 1982. By contrast, the export linkage of the CEMA (6) countries among themselves will continue its decline of past years (1970-1982 from 27.5 percent to 22.5 percent).

Another important task will be closer cooperation in the sector of the so-called agro-industrial complex (farming and all anterior and posterior sectors). This is to help achieve the quantitative and qualitative improvement of supplies to the public. Another objective of coordinated agrarian policy is presumably the increase in CEMA self-sufficiency. Grain imports from the West, in particular, are to be considerably reduced, in the first place Soviet imports (in 1982 net imports accounted for 18 percent of domestic cereal consumption in the USSR and for 4 percent of those of the CEMA (6) countries). Intra-Bloc trade in farm products is to be stimulated by investment participations of "interested" countries with the agrarian producers. "Other economic conditions," too, are supposed to stimulate these agricultural deliveries.<sup>7</sup> Hungary, Bulgaria and Romania stand to profit most from these measures.

The European CEMA members accepted the obligation "to offer continuing aid" to the recognized developing countries of the community--Cuba, Mongolia and Vietnam. Nothing was said, though, about the volume and kind of aid. As before, the Soviet Union will provide the lion's share, mainly for political reasons (export surplus in billion transferable rubles, accumulated values from 1976 to 1982):

	<u>USSR</u>	<u>CEMA (6)</u>
Cuba	0.8	0.5
Mongolia	3.2	0.1
Vietnam	2.2	0.7



Data on the Reciprocal Agrarian Trade of the CEMA Countries in 1982

	Balances in billion Transferable Rubles	Percentage Shares of Exports
Bulgaria	+ 1.28	29.6
CSSR	- 0.24	4.2
GDR	- 0.41	2.3
Poland	- 0.14	3.0
Romania	+ 0.32	9.2
USSR	- 4.77	13.4
Hungary	+ 1.70	38.3

In the field of traffic links between the CEMA nations, too, "mutually interesting investments" are to be coordinated. "Special attention is to be devoted" to shipping to Cuba and Vietnam. In general the "transit capacity of border railroad stations" is to be increased.

... And Healthy Economic Relations with Third Countries ...

In a statement of political intent, the CEMA countries expressed their wish to participate in the world economic division of labor and--within the scope of their potentials--to contribute to the "recovery of international relations in the field of economics." They want to do this by reason of their political interests, because--in the spirit of the Conference on Security and Cooperation in Europe's final act--they are convinced thereby to make a contribution to greater confidence and to detente as well as to the expansion of their influence in the Third World. Most of all, though, does this line respond to their economic interests, because the world economic situation "affects the fulfillment of their economic plans," and because the build-up of a competitive export industry and therefore, indirectly, the orderly financing of their debt service to Western creditors cannot be handled without Western technology. Cooperation with the Third World countries is necessary for the expansion of the raw materials base. The aimed for expansion of economic relations with third countries consequently does not clash with the equally desired intensification of integration within CEMA. Indeed, the two complement one another.

In this connection, the CEMA countries also wish to actively utilize the "potential opportunities for the development of commercial cooperation with capitalist states, their enterprises and firms," and a "respective agreement to that effect" is to be concluded between CEMA and the EEC.<sup>99</sup>

... While the Integration Mechanism Continues Unchanged

The final statement uses a lot of verbiage to hide the fact that nothing has been changed with regard to the basic features of CEMA cooperation. Admittedly it mentions "a new step toward the deepening of coordination of economic policy by the CEMA member countries." At the same time it emphasizes that "coordination of economic plans" will be "the prime tool

for the adjustment of economic policy." According to the CEMA "Complex Program" of 1971, this coordination was to be the "main method for organizing the cooperation and deepening of the international division of labor." Plan coordination, on the other hand, presumes the independent planning and economic policies of the various countries. CEMA principles on the relation between the national state and the community were reaffirmed (respect for state sovereignty, independence and national interests; noninterference in the countries' internal affairs; complete equality; mutual profit; comradely mutual aid). The principle of interestedness was emphasized quite particularly. Given the present mechanism for forming policy in CEMA ("unanimity of the interested members") guarantees the priority of national before community interests.

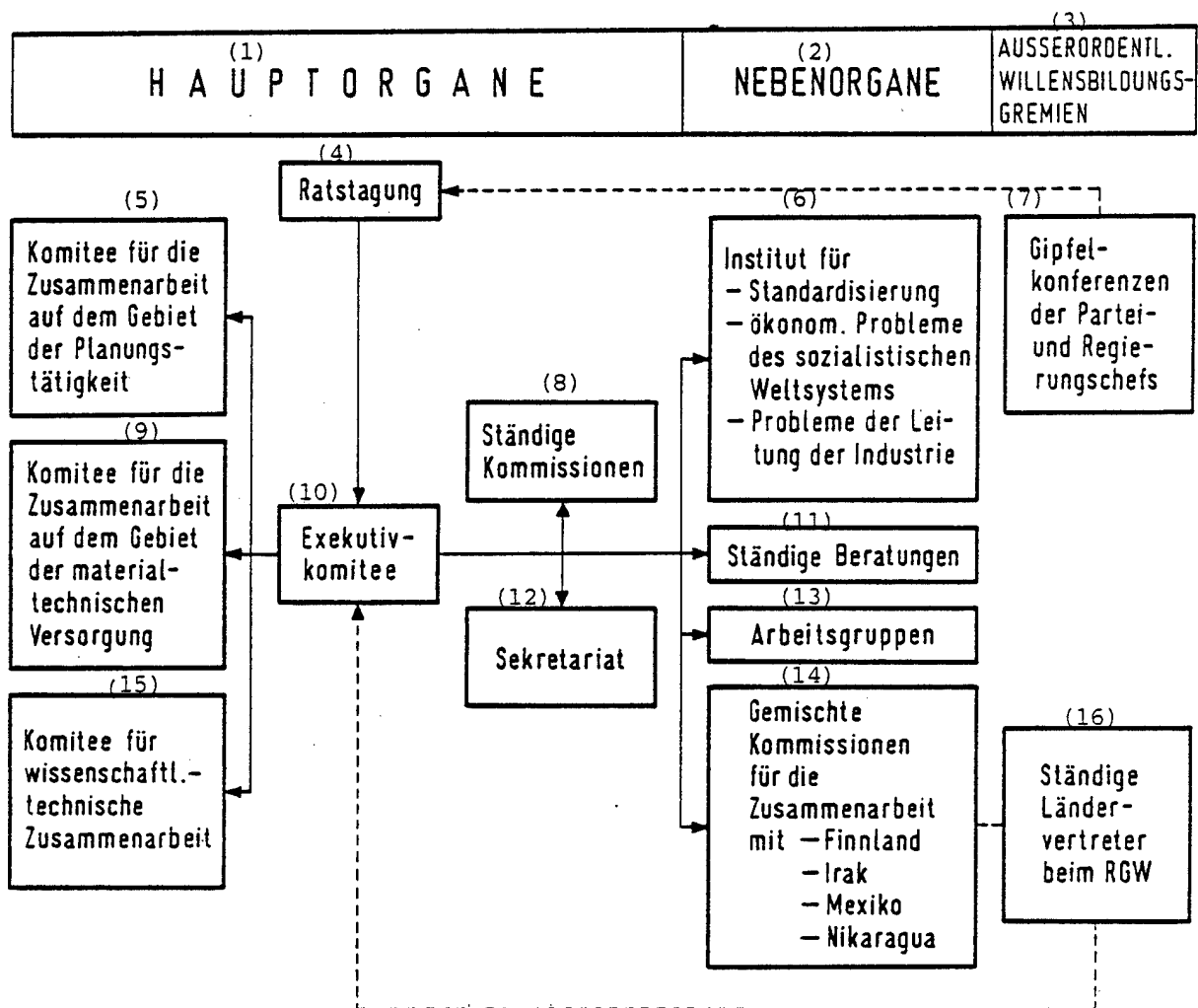
In this context it is specially important that the Soviet efforts for the "adjustment of the structures of the economic mechanism" have obviously been adjourned.<sup>10</sup> This summit was unable to arrive at new common price resolutions. The monetary tools of integration remain secondary for the remainder of this decade also--behind central planning. It was considered "useful" at the summit conference "to carry on regular meetings between party and government leaders at the highest level" (without an agreement on a time schedule being achieved).

#### Summing Up

At the 1962 summit conference, plan coordination was decided as the "main method of international socialist division of labor." The 1969 conference signaled the beginning of "socialist economic integration." By comparison, the results of this year's conference are more modest and more realistic. The actual tasks involved in the strategy decided upon will have to be drafted in the coming 18 months and then determine plan coordination 1986-1990.<sup>11</sup> The documents published represent a compromise on integration, that is acceptable to all CEMA countries: Of course this does not mean that the smaller European CEMA countries in particular will have an easy time in translating the resolutions into economic deeds. On the contrary: They will have to strain to expand and restructure their economic relations with the USSR. At the same time all CEMA economies wish to strengthen industrial cooperation precisely with respect to ultra modern equipment, so as not to fall further behind the Western industrial states in this respect.<sup>12</sup>

It is unlikely that either of these two tasks can be managed without Western equipment and Western know how. The CEMA countries have therefore stated their firm intention not to cut, let alone discontinue, their economic relations with the West. It should also be in the economic and political interest of the West for the CEMA countries to be involved in the settlement of international economic problems and to cooperate in international economic and monetary organizations.

# CEMA Organizational Structure



## Key:

- |  |   |
|--|---|
| 1. Main organs   | 7. Summit conference of party and government heads                          |
| 2. Ancillary organs  | 8. Permanent committees   |
| 3. Extraordinary policy-forming bodies   | 9. Committee for cooperation in material-technical supplies                 |
| 4. Council meeting   | 10. Executive committee   |
| 5. Committee for Cooperation in Planning Work  | 11. Standing conferences  |
| 6. Institute for Standardization, Institute of the Economic Problems of the World Socialist System | 12. Secretariat   |
| Institute for Industrial Management Problems   | 13. Study groups  |
|  | 14. Mixed commissions for cooperation with Finland, Iraq, Mexico, Nicaragua |

[Key continued on following page]

15. Committee for Scientific and Technological Cooperation

16. Permanent representatives of the member countries at CEMA

Reciprocal Trade Linking of the European CEMA Member Countries

(1)	(2)							(3)	
Jahr	Bulgarien	CSSR	DDR	Polen	Rumänien	Ungarn	RGW (6)	UdSSR	RGW (7)
	(4) Anteil der RGW (6) - Länder am Export in vH								
1970	21,5	32,0	30,2	24,9	21,4	28,0	27,4	52,8	37,9
1975	20,0	32,5	32,4	25,1	18,3	28,6	27,2	49,3	36,6
1980	16,5	27,8	28,2	21,1	17,7	26,7	23,6	42,1	32,3
1981	16,6	26,8	24,8	23,3	15,6	24,8	22,5	42,5	32,2
1982	16,1	25,9	23,6	24,0	18,9	24,1	22,6	41,6	32,0
	(5) Anteil der UdSSR am Export in vH								
1970	53,8	32,2	38,0	35,3	28,6	34,1	36,5	---	21,4
1975	54,6	33,0	35,5	31,6	19,9	38,4	34,6	---	20,0
1980	49,9	35,6	35,6	31,2	19,6	37,2	34,5	---	18,3
1981	48,3	37,6	36,5	32,4	20,8	41,8	35,9	---	18,5
1982	51,6	40,5	35,9	38,1	20,9	43,4	38,3	---	19,5
	(6) Saldo <sup>1)</sup> im RGW (6) - Handel in Mrd. Transfer-Rubel <sup>2)</sup>								
1970	+0,05	+0,08	+0,13	-0,11	-0,04	-0,07	+0,04	+0,11	+0,15
1975	-0,22	+0,01	+0,93	-0,64	-0,03	+0,13	+0,18	-0,91	-0,73
1980	-0,05	-0,56	+1,77	-0,58	-0,28	+0,18	+0,50	+4,44	+4,93
1981	-0,10	-0,51	+1,82	-0,60	-0,38	+0,25	+0,49	+7,59	+8,07
1982	-0,29	-0,55	+2,07	-0,56	-0,41	+0,16	+0,43	3) +9,56	+9,99
	(7) Saldo <sup>1)</sup> im Handel mit der UdSSR in Mrd. Transfer-Rubel <sup>2)</sup>								
1970	+0,11	+0,01	-0,18	-0,10	+0,03	-0,04	-0,17	---	---
1975	+0,28	+0,06	+0,08	+0,24	+0,45	-0,01	+1,10	---	---
1980	-0,82	-0,76	-1,80	-0,73	+0,63	-0,78	-4,26	---	---
1981	-1,34	-0,94	-2,17	-2,36	+0,63	-0,40	-6,59	---	---
1982	-1,74	-1,21	-2,42	-2,98	+0,77	+0,10	3) -7,48	---	---
	(8) Anteil der Mitgliedsländer am Intra-RGW-Export in vH								
1970	3,7	10,4	11,8	7,5	3,4	5,5	42,3	57,7	100
1975	3,4	9,1	11,7	9,3	3,5	5,9	42,9	57,1	100
1980	3,3	8,1	10,0	7,2	3,9	6,2	38,9	61,1	100
1981	3,3	7,7	9,2	6,1	3,7	5,8	36,0	64,0	100
1982	3,3	7,5	9,2	6,5	3,9	5,7	36,0	64,0	100

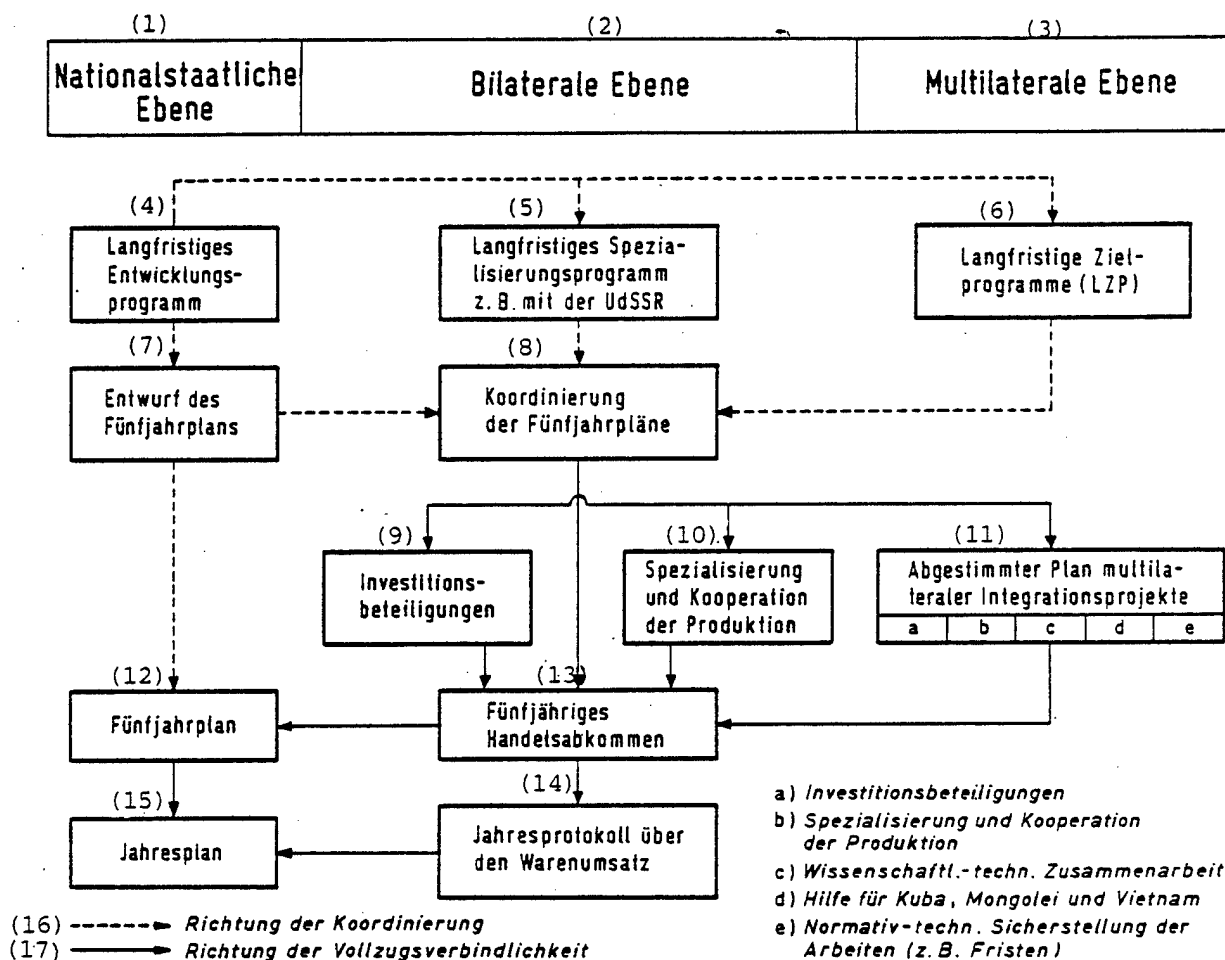
(9) 1) Überschuß: +, Fehlbefrag: -; Kumulierte Werte seit 1970.- 2) Der Transfer-Rubel (TRbl) ist die gemeinsame Verrechnungseinheit der RGW-Staaten.- 3) Der kumulierte Handelsüberschuß der UdSSR ist um 2 Mrd. TRbl größer als das - spiegelbildliche - Defizit der RGW (6) - Staaten; diese Differenz läßt sich anhand der amtlichen Außenhandelsstatistiken nicht erklären.

(10) Quellen: Statistische Jahrbücher und Außenhandelsjahrbücher der RGW-Länder; Statistisches Jahrbuch des RGW; Berechnungen des DIW.

Key:

1. Year
2. CEMA (6)
3. CEMA (7)
4. Percentage share of the CEMA (6) countries in exports
5. Percentage share of the USSR in exports
6. CEMA (6) trade balance in billion transferable rubles
7. USSR trade balance in billion transferable rubles
8. Percentage share of the member countries in intra-CEMA exports
9. Footnotes: 1) Surplus +, deficit: -; accumulated values since 1970.--  
2) The transferable ruble (TRbl) is the community clearing unit of the CEMA countries.-- 3) The USSR's accumulated trade surplus exceeds the --mirroring--deficit of the CEMA (6) states by 2 billion TRbl; this difference is inexplicable in terms of the official foreign trade statistics.
10. Sources: Statistical yearbooks and foreign trade yearbooks of the CEMA countries; CWM Statistical Yearbook; DIW calculations.

# The Context of the Most Important Integration Policies in CEMA



## Key:

- |   |   |
|---|---|
| 1. National state level   | 9. Investment participations                              |
| 2. Bilateral level  | 10. Production coopoeration and special-ization           |
| 3. Multilateral level   | 11. Coordinated plan of multilateral integration projects |
| 4. Long-range development program                               | 12. Five-year plan  |
| 5. Long-range specialization program, for example with the USSR | 13. Five-year trade agreement                             |
| 6. Long-range target programs (LZP's)                           | 14. Annual protocol on goods turnover                     |
| 7. Draft of the five-year plan                                  | 15. Annual plan   |
| 8. Coordination of five-year plans                              | 16. Trend of coordination                                 |
|   | 17. Trend of executive liability                          |

[Key continued on following page]

- a) Investment participations
- b) Production specialization and cooperation
- c) Scientific-technical cooperation
- d) Aid for Cuba, Mongolia and Vietnam
- e) Normative-technical security of the work (dates, for example)

#### FOOTNOTES

1. "Declaration by the Member Countries of the Council for Economic Mutual Aid. The Preservation of Peace and International Economic Cooperation," and "Statement on the Main Trends of the Further Development and Deepening of Economic and Scientific-Technical Cooperation by the CEMA Member Countries" (NEUES DEUTSCHLAND, 16/17 June 1984).
2. NEUER WEG, 20 June 1980.
3. Romania is the sole CEMA country which renounced imports of Soviet oil in the 1970's--for political reasons.
4. L.I. Brezhnev, "CPSU Central Committee Report to the Twenty-sixth CPSU Congress and the Next Tasks of the Party in Domestic and Foreign Policy," Moscow 1981, pp 11/12.
5. For example, Oleg Bogomolov: "CEMA Economic Strategy for the 1980's," SOWJETWISSENSCHAFT. GESELLSCHAFTSWISSENSCHAFTLICHE BEITRAEGE, No 5/1983, pp 595ff.
6. NEUES DEUTSCHLAND, 25 November 1983.
7. It is reported that the contract prices of these goods are to be raised. Bilateral price negotiations are no longer be based on world market prices (if, as in the case of cereals, such price quotations in fact exist). It has apparently been agreed now to consult the higher EC prices. The EC intervention price of hard wheat was around 50 percent above the bid price of American hard wheat in the financial years 1981/1982 and 1982/1983 (spot delivery Amsterdam/Rotterdam); In 1980/1981 the difference amounted to +17 percent.
8. The results arising from goods trade are admittedly no more than an indication of the volume of this economic aid which is likely to be greater in actual fact. NATO estimates the extent of total Soviet economic aid (including weapons supplies) to these three countries at \$32.5 billion in 1976-1982, three quarters of this to Cuba alone.
9. Negotiations between the two organizations on the initiation of bilateral relations began in 1975. So far they have been very slow and without real results. In April 1980, the EC broke them off in retaliation for the Soviet invasion of Afghanistan. It does not seem that CEMA will take the initiative for a resumption of these negotiations.

10. It is reported from Moscow that a new formula for price fixing is not to be expected before the years 1986-1990. There is no indication what this new formula is likely to be.
11. The 39th Council Meeting, at which the summit resolutions will be converted to CEMA recommendations, will take place in October next in Havana.
12. With financial aid from the Volkswagenwerk Foundation, DIW will carry out a major study on the successes, limitations, problems and prospects of "the CEMA countries' international industrial policy."

11698

CSO: 2300/597

GDR-AFGHANISTAN TRADE, PAYMENTS AGREEMENT SIGNED

East Berlin AW AUSSENWIRTSCHAFT in German No 29, 18 Jul 84 Supplement  
pp 2-7

[Text] The government of the German Democratic Republic and the government of the Democratic Republic of Afghanistan (hereinafter called the parties to the agreement), based upon generally accepted principles of international law, in particular the principles of the sovereign equality of nations and of noninterference in the internal affairs of nations, as well as on the concept of mutual benefit, and guided by the desire to develop continuing, long-term trade relations between the German Democratic Republic and the Democratic Republic of Afghanistan, have agreed to the following:

Article 1

Both parties to the agreement shall undertake every effort to promote trade between the German Democratic Republic and the Democratic Republic of Afghanistan within the scope of this agreement.

Article 2

Both parties to the agreement, in order to promote and facilitate trade between the two countries, shall grant each other most-favored-nation status in all questions concerning mutual trade relations.

Most-favored-nation status, in terms of this article, shall not apply to the following concessions:

- a) Concessions concerning border traffic which either side has granted or may grant its neighboring countries.
- b) Concessions won as a result of membership in a customs union or free trade zone or which fall under multiregional federation agreements between developing countries in which one of the parties to the agreement is or may become involved.



### Article 3

Within the scope of this agreement, goods will be supplied based on contracts between legal entities of the German Democratic Republic eligible to conduct foreign trade on the one hand and individuals and legal entities of the Democratic Republic of Afghanistan eligible to conduct foreign trade on the other.

The above-mentioned individuals and legal entities shall have complete responsibility for conducting their own commercial activities.

The individuals and legal entities of each of the parties to the agreement shall be permitted to establish customer service centers and offices, for example, in the other country in accordance with domestic and local laws.

### Article 4

In accordance with the laws and regulations in force in both countries, both parties to the agreement shall afford themselves of every means of quickly resolving all questions regarding the importing and exporting of the goods indicated in Lists A and B of this agreement. List A indicates goods to be exported from the German Democratic Republic to the Democratic Republic of Afghanistan and List B indicates goods to be exported from the Democratic Republic of Afghanistan to the German Democratic Republic. Lists A and B are an integral part of this agreement but they do not exclude the export of goods other than those contained in these lists.

### Article 5

Both parties to the agreement shall exercise their influence to provide for, among other things, inclusion of an arbitration clause in the commercial contracts, agreement between the commercial partners as to the jurisdiction of the existing court of arbitration in the German Democratic Republic or a court yet to be established in the Democratic Republic of Afghanistan, and adherence to the rules of the specified court of arbitration.

### Article 6

In accordance with applicable domestic and local laws, both parties to the agreement shall release the following goods and objects for import or export free of customs duties, taxes and other fees:

- a) Samples and advertising materials, including promotional films required for advertising purposes
- b) Tools and other objects brought in by fitters for assembly or repair work, providing that these tools and other objects are not sold

c) Goods and objects for permanent and temporary trade fairs and exhibitions, providing that these goods and objects are returned to the country of origin

d) Marked packaging containers imported for filling purposes, packaging materials for imported products and large freight containers which must be returned to the country of origin at the end of a specified time period.

#### Article 7

Each party to the agreement shall permit trade fairs and exhibitions to be conducted by companies from the other country in accordance with applicable domestic and local laws and will facilitate these activities wherever possible. The pertinent details shall be worked out between the responsible bodies and institutions of both countries.

In the interest of developing bilateral trade relations, each party to the agreement shall promote participation in the international trade fairs of the other country and shall support participation by companies from its own country at such trade fairs in the other country.

#### Article 8

Both parties to the agreement herein agree that the prices for the goods supplied within the scope of this agreement shall be based on international market pricing.

#### Article 9

All payments for the supplies and services provided within the scope of this agreement shall be in accordance with the stipulations of the valid payments agreement concluded between the two countries.

#### Article 10

For each year in which this agreement is in force, both parties to the agreement shall prepare a list of supplies of goods and services for the given calendar year. These lists shall be agreed upon three months, if possible, before the end of a calendar year for the following year.

#### Article 11

In order to promote the aims of this agreement, a joint commission will be formed comprised of representatives to be appointed by the respective governments. The joint commission shall meet at least once a year, or as often as mutually agreed upon, alternately in Berlin and Kabul.

The responsibilities of the joint commission shall include:

a) Monitoring the realization of this agreement

b) Monitoring problems which may arise during realization of this agreement or in the course of trade development between the two countries, and recommending solutions for them

c) Reviewing suggestions made within the scope of this agreement by both governments with the aim of further increasing and diversifying trade between the two countries

d) Stipulating the lists of goods discussed in Article 10 of this agreement

e) Reviewing suggestions to include partners from third countries with the aim of developing trade between both countries

#### Article 12

The stipulations of this agreement shall also be applied to contracts concluded during the period that this agreement is in force but which are not fulfilled before expiration of the period that this agreement is in force.

#### Article 13

Changes and modifications in this agreement shall require written consent by both parties to the agreement.

#### Article 14

This agreement shall become effective as of 1 January 1985 and shall be in force until 31 December 1990. After that, this agreement will automatically be extended for one additional year at a time unless notice of cancellation is given by one of the parties to this agreement three months before expiration of its period of validity. On the date on which this agreement becomes effective, the trade agreement of 13 July 1978 between the government of the German Democratic Republic and the Democratic Republic of Afghanistan shall become void.

Drawn up and signed in Kabul this 8 April 1984 in two English language originals.

For the government of the German Democratic Republic

Signed Fenske

For the government of the Democratic Republic of Afghanistan

Signed Salam

List A

GDR Exports to the Democratic Republic of Afghanistan

<u>Item</u>	<u>Goods</u>
1	Machines and technical equipment of all kinds (radio, communications, agriculture, health services and construction)
2	Machines and technical equipment for industry
3	Transportation equipment
4	Electronic parts for electrical installations and power supply networks
5	Electrical household appliances (furnaces, refrigerators, ranges)
6	Tires and hoses/tubing of all kinds
7	Metals
8	Glass for building purposes
9	Tiles for fireclay
10	Porcelain fixtures and hygienic products
11	Writing materials and cement sacks
12	Dyes and chemicals
13	Pharmaceuticals
14	Matches
15	Textiles of all kinds
16	Footwear of all kinds
17	Household goods
18	Televisions and replacement parts

List B

DRA Exports to the German Democratic Republic

<u>Item</u>	<u>Goods</u>
1	Raw cotton
2	Wool
3	Seeds
4	Small animal pelts of all kinds
5	Intestines
6	Dried fruits
7	Pomegranates and apples
8	Processed vegetables and juices
9	Raisins
10	Garlic
11	Medicinal herbs
12	Carpets and handicrafts
13	Lapis lazuli and other semiprecious stones
14	Mixed products and other raw and basic materials
15	Other goods

## Payments Agreement

Between the government of the German Democratic Republic and the government of the Democratic Republic of Afghanistan

The government of the German Democratic Republic and the government of the Democratic Republic of Afghanistan, guided by the desire to further develop and strengthen the friendly relations between the German Democratic Republic and the Democratic Republic of Afghanistan in the area of financial transactions, and in keeping with generally accepted principles of international law, in particular the principles of the sovereign equality of nations and of non-interference in the internal affairs of nations, have entered into this agreement.

### Article 1

All payments for supplies of goods and services between individuals or legal entities having their residence or domicile in the German Democratic Republic and individuals or legal entities having their residence or domicile in the Democratic Republic of Afghanistan shall be based upon this agreement in accordance with the applicable laws regarding foreign currency transactions and controls in each of the two countries.

### Article 2

#### 1. For this purpose:

--The Deutsche Aussenhandelsbank AG (German Foreign Trade Bank) of Berlin acting for and on behalf of the government of the German Democratic Republic, shall open an account in U.S. clearing dollars in the name of the Da Afghanistan Bank of Kabul to be designated the "GDR/Afghanistan Clearing Account."

--The Da Afghanistan Bank shall open a corresponding reciprocal account.

2. The account shall be in U.S. clearing dollars and shall be free of interest, commissions and service charges.

### Article 3

Claims and obligations to be compensated within the scope of the stipulations of this agreement shall be expressed in U.S. clearing dollars; thus, contracts for supplies of goods and services, as well as invoices and orders for payment, shall be drawn up in U.S. clearing dollars.

### Article 4

1. In order to facilitate payments within the scope of this agreement, the parties to the agreement shall grant one another an interest-free swing credit in the amount of 2 (two) million U.S. clearing dollars in the account designated in Article 2 of this agreement.

Upon increases in sales volume, the swing credit may be increased by mutual consent.

2. Should the balance in the account designated in Article 2 exceed the amount of the swing credit, an interest rate of 3 percent shall be charged on the excess amount.

3. The status of the account shall be determined on 30 June and 31 December of each year. If the swing credit has been exceeded, it shall be compensated by additional supplies of goods within 6 months. If at the end of this time the balance has not been reduced to the agreed amount of the swing credit, the amount in excess of the swing credit shall be paid within 30 days in convertible U.S. dollars or in another convertible currency.

#### Article 5

The Deutsche Aussenhandelsbank AG and the Da Afghanistan Bank shall conclude a banking procedure contract with respect to realizing the stipulations of this agreement.

#### Article 6

Subject to prior consent by the parties to this agreement, money transfers may be made from the account designated in Article 2 of this agreement to a third country or from a third country into said account.

#### Article 7

1. If, following the expiration of this agreement, the balances in the accounts named in Article 2 are not carried over to the accounts named in a new payments agreement, each balance shall be offset by supplies of goods and services.

2. A balance which has not been offset by supplies of goods and services within 6 months following expiration of this agreement shall be paid immediately in convertible U.S. dollars or another convertible currency.

#### Article 8

This agreement shall become effective on 1 January 1985 and shall be in force until 31 December 1990. After that, this agreement will automatically be extended for one additional year at a time, unless notice is given by one of the parties to the agreement three months before expiration of its period of validity.

Drawn up and signed in Kabul this 8 April 1984 in two English language originals.

For the government of the German Democratic Republic

Signed Fenske

For the government of the Democratic Republic of Afghanistan

Signed Salam

12552

CSO: 2300/592

LOCATION, DENSITY OF TELEPHONE STATIONS DESCRIBED

Budapest FIGYELO in Hungarian No 28, 12 Jul 84 pp 1, 4

[Article by Karoly Borsos: "Telephony"]

[Text] The developing international commercial and trade relations necessitate the relatively rapid establishment of a minimum of 2 - 25 telephones per 100 inhabitants call station density even in underdeveloped (A1 and A2 category) countries. Although economic factors still do not justify this for a GDP under \$1,000 - \$2,000 per inhabitant. Near \$2,000 per capita GDP, we reach the level where modern telecommunication makes a worthwhile contribution to the development of the peoples economy, and, conversely, the lack of communications causes significant damage in development.

At this level, however, it is possible that the advantages resulting from the development of some other production branches outweigh the damage caused by the lack of communications. This is especially true for the development of light industries. Of course, it is questionable whether good organization is possible either in light industry or modern agriculture without good communications. The post offices of A and B category countries reacted differently for the attainment of this production level. For instance, in Taiwan, which follows the Japanese example, the call station density per 100 inhabitants increased from 4.5 telephones to 17.8 between 1971 and 1981. In Greece, during the same period, density increased at a somewhat slower rate, from 12.0/100 to 28.9/100. In socialist countries, the development programs took a very different direction.

In Hungary, call station density grew at a very slow rate. In Czechoslovakia and the GDR, the present density is only slightly below what is required by production levels, but slowdown in development may cause difficulties in a few years even there. Bulgaria -- with similar population and territory as Hungary -- discovered the relationship between economic development and telecommunications early and, starting from a low level, reached the level planned for 1985 in our country. Soviet economists have been studying since 1970 the close relationship between production and telecommunications, and as a result the rate of development accelerated. Yugoslavia, having started from a very low level, will also surpass us in a few years in spite of their economic problems.



Around the \$7,000 GDP level, public (main and branch) call stations become saturated. In this case, there are 16 - 32 work place telephones per 100 inhabitants. In our country, saturation will occur at the 21/100 value. Above the \$7,000 per capita GDP level the main driving force of network development is no longer production interest. At this level, per capita income is so high that the use of wages earned in 30 - 35 hours for calls is satisfactory for the economic operation of a home telephone.

### Types of Shortages

On the scale of the national economy, telecommunication, as an integral part of production, produces results in two areas. First, income earned from calls made in post offices contributes to the growth of national production and, consequently, the GNP. Second, the telephone, as a precondition for the effective functioning of the economy, increases the national product for those taking advantage of the service. In these two areas, the existence or absence of telecommunication can be accurately justified, while only a rough estimate of the social benefits can be made because of the lack of research in this area.

In our country, the yearly gross national product is estimated at 2,200 billion forints. This value would correspond to a 18-19/100 call station density. This density requirement is confirmed by the waiting list of 340,000 of registered potential costumers in addition to the existing 1,380,000 call stations and, more importantly, by the justified demands of the 4.5 million people inhabiting 75 percent of the country and the requirements of at least 300,000 agricultural and other plants for continuous telephone service. Thus the shortage is  $18.8 - 12.5 = 6.3/100$  density, i.e., 674 thousand call stations for 10.7 million inhabitants.

Currently the average income from a call station is 5,185 forints a year; taking this into account, the corrected lack of income for the missing 674 thousand call stations is 3.5 billion forints. The probability of 18.8/100 density value had to be justified along with the loss of income. To this end, instead of using uncertain foreign data, it is useful to start with national data. In our country, at the end of 1980, call station density was at 11.7/100. Half of the population lived in cities and other communities connected to the phone network, where the average density was at 20.2/100. In the first half, local calls amounted to 932 million pulses, i.e., there were 185 pulses per inhabitant, which corresponds to an equal number of calls per person, while in the other half of the county out of 138 million calls, the share of one inhabitant is only 27. In the case of long distance calls, the share of one person is 95 pulses or 4.17 pulses. The part of the country with the better service transferred  $185 + 95 = 280$  pulses of information, which is near Austria's 301 or Holland's 328. In the other half of the country, the share of one person is  $27 + 4.17 \times 6 = 55.2$  pulses. In a fully automated and 18.8/100 call station density network not only the added 674 thousand new stations would generate income but also traffic in under-developed areas could also approximate that in better served regions. In the case of the existing network, there would also be a larger demand placed on post offices.

### How Expensive is the Shortfall?

We can assume that the use of telephones results in at least as much profit in production, transport and trade as the expenses involved in providing the service. This assumption could be directly substantiated only by detailed measurements at well supplied companies, but to prove the validity of the thesis it may be enough to demonstrate that losses caused by the lack of service are greater than the expenses associated with the expanded demands. Next, we shall list a few of the typical losses:

--a) Losses caused by delay. Under current service conditions, in automatic networks, successful calls are less than 40 percent of the total calls made, and, in this case, all of those errors, which result in the called party being disconnected are counted as successful calls. At least one minute elapses from the lifting of the hand set until the called party answers. 73 percent of the calls is initiated from public stations (1979 data), and thus for 700 million calls, taking into account hourly wages and operating expenses, losses can be estimated at 1.5 billion forints. If the necessary delays in manually switched local and long distance calls are also considered, losses may be as high as 2 billion forints annually for those who have telephones.

--b) Telephone substitutes. In the poorly serviced half of the country, the railroad, automobile, per diem, etc., expenses to make up for the 600 million pulses that cannot be initiated are at least twice as much as tariffs, so they are nearly 1.8 billion forints, and this figure does not even include the effective loss in work hours required for travel.

--c) Empty runs made by motor vehicles. The use of motor vehicles -- especially business vehicles -- could be made more effective if the driver could call the party initiating the run and the sender could call the party initiating the run and the sender could call the destination in all areas of the country. In the case of 50 to 60 million kilometer savings, the result would amount to one billion forints.

--d) Inventory reduction. At present, the total value of raw materials, parts, semi-finished and finished goods stored in the country is 600 billion forints, which represents 7.5 percent of the total assets of the country. The annual interest, obsolescence loss and storage expenses associated with this unrealistically high percentage result in 72 billion forints of non-productive outlays. In the case of inventories controlled by good communications and computers stocks could be significantly reduced.

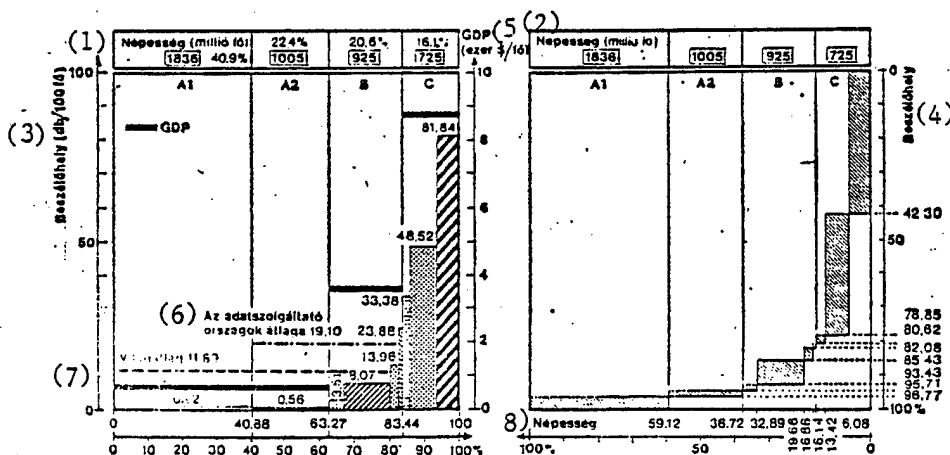
Thus far, there has not even been any experiments to assess the sociological significance of telecommunication in our country, and thus it is rather difficult to demonstrate the associated benefits or damages caused by its absence. Based on some phenomena, we may reason that its absence is extremely negative and causes problems, which are difficult to correct later on.

In connection with the foregoing, it must be observed that the 116 thousand call stations in the country in 1932 (77 thousand in Budapest) were sufficient because it corresponded to the industrial structure centered around Budapest and the demands of the intermediate level agriculture; they satisfied demands of the population in accordance with per capita GNP and the low wages. Even under the unfavorable economic conditions, service in Budapest (7.6/100 inhabitants) ranked 14th among European cities. For example, Antwerp, Amsterdam, Rome and Tokyo were behind Budapest, i.e., numerous cities where density today is over 70/100.

The great increase in the standard of living of the population today by the multiplication of industrial capacity and modernization of agriculture means that in telephone service we are approaching the demands in developed countries. After satisfying demands for cars, televisions, refrigerators it is impossible not to solve telephone service without a worsening of social conditions.

Call density distribution  
by population and per capita  
GDP in 1980

Distribution of existing call  
stations of the world by the end  
of 1980, by categories, by  
population percentage



- Key:
1. Population (one million people)
  2. Population (one million people)
  3. Call stations (number/100 people)
  4. Call station
  5. GDP (thousand dollars/person)
  6. Average of countries furnishing data
  7. World average
  8. Population

# Call station density values in socialist countries

	1971	Helyiállomás-sűrűség	
		1981	növekedése %
1 Csehszlovákia	13,8	20,6	49,2
2 NDK	12,1	18,9	56,1
3 Magyarország	8,0	11,7	46,2
4 Lengyelország	5,7	9,4	64,9
5 Bulgária	5,5	14,1	154,0
6 Szovjetunió	4,5	8,8	95,5
7 Jugoszlávia	3,6	9,5	164,0

Key: 1. Czechoslovakia 5. Bulgaria  
 2. GDR 6. Soviet Union  
 3. Hungary 7. Yugoslavia  
 4. Poland 8. Percent increase of call station density

## Telephone service in the capital and county capitals by the end of 1983

Város (1)	helyiállomás/100 lakos (2)	megyei átlag (3)
Budapest	32,4	
Székesvárad	25,4	8,3
Győr	22,6	11,7
Eger	22,4	9,0
Pécs	22,2	12,2
Miskolc	20,9	9,6
Tatabánya	20,9	8,6
Zalaegerszeg	20,2	8,9
Veszprém	18,1	9,4
Salgótarján	17,8	8,0
Szeged	17,5	9,9
Szombathely	16,5	8,3
Debrecen	16,5	8,0
Vác	16,5	4,6
Szolnok	15,8	5,9
Békéscsaba	15,5	6,0
Kaposvár	15,0	7,7
Kecskemét	13,4	6,7
Székesfehérvár	12,4	7,0
Nyíregyháza	10,8	4,3
Országos átlag (4)	12,95	
Vidéki átl. (Bp. nélkül) (5)		7,38

Key: 1. City  
 2. Call station/100 inhabitants  
 3. County average  
 4. National average  
 5. County average

Call stations, the individual main station types and the number and distribution of people on the waiting list at the end of 1983\*

(1)	Összes bekapcsolt beszélőhely:	1 383 153
	(2) Ebből lakás:	447 355
	Budapest:	272 406
	(3) vidék:	174 949
	(4) közületi:	211 119
	Budapest:	32 912
	(5) vidék:	138 207
	nyilvános állomás:	17 910
	Budapest:	8 145
	(6) vidék:	9 765
	fülkéállomások összesen:	676 384
	Budapest:	373 463
	(7) vidék:	302 921
	telefonigénylők száma:	340 000
	Budapest:	240 000
	(8) vidék:	140 000
(9)	* A Magyar Posta adatai szerint. A postal statisztika beszélőhelynek tekinti az összes fő- és mellékállomást	

- Key:
1. Total number of call stations connected:
  2. Number of home stations
  3. Country
  4. Public
  5. Country
  6. Country
  7. Country
  8. Country
  9. According to the data of the Hungarian Post Office, according to postal statistics all main and extension stations are call stations

9901

CSO: 2500/485

## BULGARIA

### CONSUMER GOODS SUPPLY AIMED AT CURBING 'POLISH BACILLUS'

Frankfurt/Main FRANKFURTER RUNDSCHAU in German 18 Jul 84 p 13

[Article by Harry Schleicher: "Sofia Arms Itself Against 'Polish Bacillus'. Improved Supplies of Consumer Goods Eliminate Waiting Lines. Western Businessmen Ready to Seize Opportunity."]

[Text] The flight to Sofia is booked solid. This rather unusual occurrence en route to an East European capital may have a specific reason on a Monday: Businessmen are particularly anxious to fly in and take advantage of a full business week. The expensive briefcases carried by most of the passengers on this flight to the Bulgarian capital hardly indicate tourists on their way to vacations in the Balkan or Rhodope Mountains or on the Black Sea. While the flow of Western tourists into this inexpensive vacationland is stagnating or even declining, Bulgaria is consoled by a flood of Western businessmen. Many of them apparently still hope to be able to do the kind of business that, due to the de facto insolvency of a number of other communist countries, is scarcely possible elsewhere in Eastern Europe.

Although Bulgaria rarely makes political headlines, due not only to its peripheral location but also to its unsensational politics, this Balkan nation of just under 9 million people is the subject of increasing attention. Apart from some of the negative publicity produced by the case of Sergey Antonov, a Bulgarian citizen who has been in investigative custody in Rome for more than two years now following the attempted assassination of the pope, and the not entirely unjustified stir caused in Sofia by the strange circumstances surrounding his case, Bulgaria is being talked about for the simple reason that it has provided so few other headlines. In contrast to its northern neighbor Romania and also Poland, Bulgaria has been spared an economic crisis. With a debt of about 2 billion U.S. dollars--there are no official Bulgarian statements on this subject--Bulgaria is considered reliable in repaying its loans and thus remains a credit-worthy debtor. It is no wonder that representatives of Western firms--due also to the fact that so few companies maintain permanent offices in Sofia--are knocking on the doors of the pertinent ministries and of companies engaged in foreign trade. "Bulgaria, an economic wonder?" On the topic of economics and reforms, our interlocutor in Sofia is aware of such occasional complimentary labels for his country but refers to them strictly as intellectual simplifications. Despite economic successes during the past few years, such estimations are upheld only to a limited

extent under more realistic scrutiny. Appearances confirm Bulgarian statements that supplies of consumer goods have clearly increased. "Socialism without waiting lines" was how a respected Polish newspaper enviously characterized the Bulgarian economic model. Although this is true, it does not mean that Western standards of quality and quantity can be applied.

Bulgaria is often called the "fruit and vegetable garden of the East Bloc," and the fact that it has had sizable increases in food production, particularly since 1981, is not infrequently used in drawing comparisons with the events in Poland. In order to immunize Bulgaria against a possible spread of the "Polish bacillus," local markets have received additional supplies at the expense of the country's own agricultural export market. As always, Bulgaria's agriculture, which has been organized into very large-scale agrarian/industrial combines for decades, not only feeds its own population but also contributes in no small measure to this country's large foreign-currency income.

With an average monthly net income of 196 leva, however, (according to the official exchange rate, one lev equals one U.S. dollar) this relative prosperity is anything but cheap, and earning at two jobs is widespread. A Soviet color television, for example, costs over 1000 leva, a black and white set over 400 leva. Despite high prices, buying a car still involves waiting many, many years. It is no wonder that there is little concern about permanent damage to the environment caused by too much automobile traffic. In addition, one liter of premium gasoline costs just under one lev. A kilogram of meat costs up to six leva. Slightly more than twice that amount, on the other hand, is all it costs to rent an average two-room apartment. "One of the secrets of satisfaction with this relative prosperity," explained a Bulgarian acquaintance of mine, "is psychological in nature. Since the Second World War we have progressed slowly but also steadily." Bulgaria has been spared those dramatic setbacks in economic development which spill over into the political arena.

This continuing economic upswing is an important success for which the country's leadership can take credit, in view of the upcoming 40th anniversary of Bulgaria's transformation from a pro-German monarchy to a pro-Soviet people's democracy. Todor Zhivkov spent three-quarters of this period as party head--thus he has served as head of the Communist Party longer than anyone in any other Warsaw Pact nation--and later directed his country's economic and political development as its head of state. While the watchword in the years since 1944 has been "eternal friendship" with the Soviet Union and while Bulgaria has won a reputation as Moscow's closest and truest ally, this country has also experienced increasing national awareness. The huge celebration three years ago of the 1300th anniversary of the founding of the first Bulgarian state was no casual event; since then Bulgarian nationalism has manifested itself repeatedly and consistently in various forms.

PRICE COMPENSATION FOR HOUSING IN AGRICULTURAL SECTOR RAISED

East Berlin GESETZBLATT DER DEUTSCHEN DEMOKRATISCHEN REPUBLIK in German  
Part I No 21, 18 Jul 84 pp 269-271

["Order on State Financial Support of New Construction, Maintenance and Use of Housing by Enterprises and Institutions of Agriculture and Forestry of 22 June 1984," signed by Dr Cesarz, deputy minister for Agriculture, Forestry and Foodstuffs and Dr W. Siegert, state secretary and first deputy minister, Ministry of Finance]

[Text] In concert with the managers of the competent central state organs and with the agreement of the Central Executive Board of the Peasants' Mutual Aid Association, the following is ordered:

Article 1

Scope

- (1) This order systematizes the central financial encouragement of the new construction of enterprise-owned one and two family homes as well as one and two storey row houses (hereinafter designated enterprise-owned residential buildings) by LPG's, GPG's [horticultural producer cooperatives], other socialist cooperatives in agriculture, VEG's and their cooperative facilities, farmers' trading cooperatives and state forestry enterprises (hereinafter designated agricultural and forestry enterprises).
- (2) This order also arranges for the equalization of additional costs arising for LPG's, GPG's, other socialist agricultural cooperatives and their cooperative facilities as well as for farmers' trading cooperatives (hereinafter designated agricultural cooperatives) with regard to the maintenance and use of housing units, residential buildings and ancillary buildings (hereinafter designated housing).

Article 2

Financial Encouragement of the New Construction of  
Enterprise-Owned Residential Buildings

- (1) Articles 5, 9 and 12 of the Decree of 31 August 1978 on the New Construction, Modernization and Repair of Family Homes--Family Home Decree--(GBI I No 40



p 425) and the regulations thereto issued in implementing regulations<sup>1</sup> are to be appropriately applied to the new construction of enterprise-owned residential buildings by agricultural and forestry enterprises.

(2) The amount of the price equalization lump sum<sup>2</sup> and of the interest-free loan<sup>3</sup> arises from the cost normative fixed in conjunction with the permit for the new construction of enterprise-owned residential buildings.

### Article 3

#### Price Equalizations for Building Repairs, Other Repairs, Modernization, Remodeling and Extension Work on Housing

(1) Agricultural cooperatives will obtain price equalization for building repairs, modernization, remodeling and extension work on housing, amounting to the difference between the new industrial prices and the industrial prices formerly applicable to agricultural cooperatives as per the status of 1 January 1966.

(2) The amount of price equalization for building repairs, modernization, remodeling and extension work is ascertained as per Attachment 1.

(3) Price equalization for other repairs is granted in the amount of the difference between the new industrial prices and former industrial prices as per the price status of 31 December 1983.

(4) In case of the simultaneous use of buildings for residential and other purposes, price equalization is granted proportionately for services as per Paragraphs 1-3 to the part of the building used for residential purposes.

(5) If the agricultural cooperatives themselves carry out building repairs, other repairs, modernization, remodeling and extension work, their performances are to be valued at the new industrial prices.

### Article 4

#### Price Equalizations for the Consumption of Energy for the Use of Housing

(1) Agricultural cooperatives will receive price equalization for the consumption of energy for the use of housing in the amount of the difference between the new industrial prices and the former industrial prices charged agricultural cooperatives as per the status of 31 December 1981.

(2) Consonant with the legal regulations in effect,<sup>4</sup> the competent kreis council, department for agriculture and forestry, fix for agricultural cooperatives material upper limits for the consumption of the various types of energy, up to which price equalization is granted. No price equalization is granted when the upper limit for the consumption of the respective type of energy is exceeded.

(3) Price equalization as per Paragraph 1 is ascertained as provided in Attachment 2.

## Article 5

### Price Equalization for Other Services Involved in the Use of Housing

(1) For potable and nonpotable water, sewer connections, the collection of fecal matter and garbage for the use of housing, agricultural cooperatives receive price equalization in the amount of the difference between the new industrial prices and the former industrial prices charged agricultural cooperatives as per the status of 31 December 1983.

(2) Price equalizations for services as per Paragraph 1 must be separately ascertained for each service and verifiably recorded by the agricultural cooperatives.

## Article 6

### The Grant of Price Equalizations

Applications for, the grant of, the recording of proof and verification of price equalizations as per Articles 3-5 proceed in accordance with the legal regulations on product-related taxes and price subsidies.

## Article 7

### Transitional Provisions

(1) Agricultural and forestry enterprises may apply to the competent kreis council, department for finances, for the grant of price equalization amounts as per Article 2 Paragraph 1, with respect to enterprise-owned residential buildings as per Article 1 Paragraph 1, completed in the period from 1 January 1984 to 31 July 1984.

(2) Agricultural cooperatives may apply to the competent kreis council, department for finances, for price equalization with regard to additional costs as per Article 1 Paragraph 2, which have arisen in the period from 1 January 1984 to 31 July 1984.

(3) State subsidies for the new construction of housing granted in the period from 1 January 1984 to 31 July 1984 and price differences reimbursed for building repairs, modernization, remodeling and extension work on the housing stock as per the Order of 2 October 1972 on State Encouragement of Housing Construction Financed by LPG's, VEG's, GPG's and Their Cooperative Facilities (GBI II No 63 p 687) are to be set off against the price equalization amounts as per Paragraph 1 or the price equalizations as per Paragraph 2. State subsidies and price differences already paid need not be refunded.

(4) Applications as per Paragraphs 1 and 2 must be submitted by 30 September 1984. The manager of the department for finances decides these applications within 4 weeks in coordination with the manager of the department for agriculture and the food industry.

(5) An appeal may be lodged within 2 weeks against decisions as per Paragraph 4 with the organ that had issued the original decision. The appeal must

be decided within 4 weeks. If the appeal is disallowed or allowed only to a limited extent, it must be forwarded for decision to the competent district council, department for finances. The manager of the department for finances issues the final decision within 2 weeks in coordination with the first deputy to the manager of the special organ for agriculture, forestry and the food industry.

(6) With respect to enterprise-owned residential buildings, construction of which commenced between 1 January 1984 and 31 July 1984, agricultural and forestry enterprises may apply for application of the provisions on the grant of loans as per Article 2 Paragraph 1 at the competent branch office of the Bank for Agriculture and Foodstuffs.

(7) The director of the branch office of the Bank for Agriculture and Foodstuffs issues a decision on the application as per Paragraph 6 within 2 weeks. His decision is final.

#### Article 8

#### Concluding Regulations

(1) This order takes effect on 1 August 1984.

(2) Losing effect at the same time is the Order of 2 October 1972 on State Encouragement of Housing Construction Financed by LPG's, VEG's, GPG's and their cooperative facilities (GBI II No 63 p 687).

#### FOOTNOTES

1. Currently in effect are:
  - First Implementing Regulation of 31 August 1978 to the Family Home Decree (GBI I No 40 p 428),
  - Second Implementing Regulation of 27 December 1979 to the Family Home Decree (GBI I 1980 No 4 p 33),
  - Third Implementing Regulation of 10 February 1983 to the Family Home Decree (GBI I No 6 p 65).
2. In effect at this time is the Third Implementing Regulation of 10 February 1983 to the Family Home Decree (GBI I No 6 p 65).
3. In effect at this time is the First Implementing Regulation of 31 August 1978 to the Family Home Decree (GBI I No 40 p 428).
4. In effect at this times are:
  - Energy Decree of 30 October 1980 (GBI I No 33 p 321),
  - Second Implementing Regulation of 25 April 1984 to the Energy Decree--Energy Management Norms and Indices--(GBI I No 16 p 196).
5. In effect at the present time are the Decree of 1 July 1982 on Product-Related Taxes and Price Subsidies (GBI I No 30 p 547), the First Implementing Regulation of 1 July 1982 to the Decree on Product-Related Taxes and Price Subsidies (GBI I No 30 p 550) and the Second Implementing Regulation of 20 May 1983 to the Decree on Product-Related Taxes and Price Subsidies (GBI I No 15 p 165).

#### Attachment 1 to the Preceding Decree

##### Ascertainment of the Price Equalizations for Building Repairs, Modernization, Remodeling and Extension Work to Housing

Price equalizations are to be ascertained on the basis of the new industrial prices as per the price status of 1 January 1984 and the following coefficients:

Demolition work	0.20
Bricklaying	0.59
Plastering	0.34
Carpentering	0.60
Cement and steel reinforced cement work	0.58
Scaffolding work	0.36
Reconstruction work	0.27
Caulking	0.29
Painting and wallpapering	0.36
Roofing	0.37
Glazing	0.24
Floor work	0.21
Stove fitting	0.36
Tile laying	0.49
Gas fitting	0.42
Plumbing	0.29
Heating installation work	0.31

#### Attachment 2 to the Preceding Order

##### Ascertainment of the Price Differences for the Consumption of Energy for Housing

Reimbursement of the price differences for energy supplies proceeds on the basis of this order for the internal consumption of agricultural cooperatives.

When passing on energy costs to the public, product-related price subsidies apply as per the Decree of 1 July 1982 on product-related taxes and price subsidies and the implementing regulations issued thereto.

#### 1. Price Differences for Electric Energy

The price difference between new industrial prices with a price status as of 1 January 1984 and the former industrial prices as per the price status of 31 December 1981 amounts to M0.069 per kilowatt hour.

#### 2. Price Differences for Distant Heat

Agricultural cooperatives ascertain the price differences between the industrial prices as per the price status of 1 January 1983 and M2.39 per GJ for the consumption of housing units. When distant heat is produced internally, the price difference between M2.39 per GJ and the documented costs must be ascertained--not to exceed the new industrial prices.

When distant heat is produced internally, the costs per unit of volume must be calculated by the agricultural cooperatives and verifiably recorded. Following an audit, the competent kreis council, department for agriculture and food, fixes a settlement price per unit of distant heat, and this is the basis for the ascertainment of the price difference to the M2.39 per GJ price. The new industrial price represents the upper limit for the settlement price.

The proportional consumption of purchased or internally produced distant heat for housing is to be exactly recorded. The competent kreis council, department for agriculture and food, confirms to the agricultural cooperatives the methods and procedures for the ascertainment and reporting of the proportional consumption for housing.

### 3. Price Differences for Other Types of Energy

If the consumption of other types of energy for apartments cannot be separately or directly ascertained, the proportional consumption is to be exactly measured.

The competent kreis council, department for agriculture and food, confirms to the agricultural cooperatives the methods and procedures for the ascertainment and reporting of the proportional consumption for housing.

When ascertaining the price differences, the annual 2 percent increase in the industrial prices of solid fuels and gas and the M20 per ton rise in the industrial price of heating oil is to be deducted. These industrial price increases must be offset by earnings of the agricultural cooperatives.

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CSO: 2300/596

GERMAN DEMOCRATIC REPUBLIC

EXPANSION OF DECREE ON SOCIAL FUND CONTRIBUTIONS

East Berlin GESETZBLATT DER DEUTSCHEN DEMOKRATISCHEN REPUBLIK in German  
Part I No 18, 28 Jun 84 p 238

["Second Decree on the Contribution to Social Funds of 14 June 1984," signed  
by W. Stoph, chairman, Council of Ministers of the German Democratic Republic  
and G. Schuerer, chairman, State Planning Commission]

[Text] In supplementation to the Decree of 14 April 1983 on the Contribution  
to Social Funds (GBI I No 11 p 105), the following is decreed:

Article 1

Article 1 is supplemented as follows after the first mark:

" -- the state owned combines and enterprises of district managed industry,  
the fruit and vegetable processing industry, the foodstuffs industry  
and the water supply, the state owned combines and enterprises of  
trade in means of production, the state owned combines and enterprises  
of the transportation system including the GDR Railroad and Mitropa."

Article 2

Article 5 is given the following version:

"Article 5

Implementing regulations are issued by the chairman of the State Planning  
Commission jointly with the Minister for Finance and the director of the  
Office for Prices."

Article 3

This decree takes effect on 15 July 1984. It is applicable to

- The district managed industry, the fruit and vegetable processing industry,  
the foodstuffs industry and water supply, beginning with the 1985 plan  
preparation,
- The trade in means of production, beginning with the 1985 plan preparation  
and in coordination with the taking of effect of new trade margins,
- The transportation system, beginning with the 1986 plan preparation.

GERMAN DEMOCRATIC REPUBLIC

ACADEMY OF SCIENCES TO WORK MORE CLOSELY WITH ECONOMY

East Berlin GESETZBLATT DER DEUTSCHEN DEMOKRATISCHEN REPUBLIK in German  
Part I No 19, 4 Jul 84 pp 241-248

["Statute of the Academy of Sciences of the GDR - Resolution of the Council of Ministers of 28 June 1984," signed by W. Stoph, chairman, Council of Ministers of the GDR]

[Text] The Academy of Sciences of the GDR is a scientific institution of the German Democratic Republic.

Originating with the Brandenburg Society of Sciences, created by Gottfried Wilhelm Leibniz and founded on 11 July 1700, the Academy of Sciences of the GDR continues to pursue the scientific and humanist traditions of its history and its eminent scholars.

In its capacity as research institution and community of outstanding scholars, the Academy of Sciences of the GDR is responsible for the advancement of basic and applied science, and for the application of new scientific knowledge to the social development of the GDR. By its scientific results and their application in practice, the Academy contributes to the speed-up of scientific-technical progress, the comprehensive strengthening of the German workers' and farmers' state--rooted in the socialist community of nations--, the rise in the material and cultural standard of living of the people in the GDR, the consolidation of peace as well as to understanding among the peoples and their social and cultural advance.

The Academy of Sciences of the GDR organizes its operations on the basis of resolutions by the Socialist Unity Party of Germany and the Government of the German Democratic Republic, the laws and other legal regulations. It carries out the task--established in the Constitution of the GDR--to encourage science, research and education.

I.

Status of the Academy of Sciences of the GDR

Article 1

Social Status

(1) As the scientific center of the GDR, the Academy of Sciences of the GDR (hereinafter designated Academy) comprises a community of outstanding

scholars and efficient research facilities, largely engaged in basic and applied research.

(2) The Academy is part and parcel of the GDR's scientific potential and, in conjunction with other research, development and educational facilities, contributes to the further organization of the developed socialist society, the improvement of the national economy's capacity and the scientific penetration of all social sectors.

## Article 2

### Legal Status and Domicile

(1) The Academy is a legal entity and budget organization. Its budget plan is part of the state budget plan.

(2) The Academy is subordinated to the Council of Ministers. The chairman of the Council of Ministers decides the powers arising therefrom.

(3) The Academy owns all the rights and has all the duties of the former German Academy of Sciences at Berlin, including the rights of its predecessors in title.

(4) The Academy keeps an official seal and a traditional seal.

(5) The Academy is domiciled in Berlin, the GDR capital.

## II.

### The Tasks of the Academy

## Article 3

### Scientific and Scientific Policy Tasks

(1) The Academy has the task of further developing science by performances at high scientific standards and with the greatest possible social efficacy, and by the creation of the scientific prerequisites, to cooperate in the organization of the developed socialist society in the GDR. It uses its scientific potential as planned for the main trends of scientific and technical progress and ensures the systematic improvement of its capacity.

(2) The Academy carries on research with the aim of gaining new perceptions on the laws of nature, technology, society and human life, developing new research methods and making available the results of its scientific efforts for the development of the socialist society, the national economy, education, culture and health care in the GDR, and the security of socialist achievements. The Academy carries on technological research to create and further develop technologies.

(3) Together with central state organs, combines and institutions, the Academy works for the broad utilization of the results of its scientific efforts and their rapid transfer to practice, in particular production.



(4) On the basis of planned analytical-prognostic studies and in cooperation with the State Planning Commission, the Ministry for Science and Technology and other central state organs, the Academy drafts recommendations for the development of specific fields in science and technology and for long-range research objectives as well as appraisals of the social effects of scientific and technical progress. It involves itself in the drafting of long-range development strategies for the national economy.

(5) Together with the Ministry for University and Technical School Affairs, the Academy plans and coordinates specified fields of basic research in the natural sciences, mathematics and engineering. It exercises coordinating functions in certain fields of sociological and medical research.

(6) The Academy encourages scientific and cultural life in the GDR, the creative application and propagation of a scientific ideology, Marxism-Leninism, and the education of the people of the GDR. It guards and nurtures progressive humanist traditions in science, technology, education and culture.

(7) In order to carry out its tasks, the Academy maintains international relations. It coordinates international cooperation with the Academies of Sciences of the USSR and other socialist states in the field of basic research into natural sciences, mathematics, engineering and medicine as well as sociological research.

(8) The Academy contributes to the expansion of the international fund of scientific knowledge; it systematically utilizes this fund within the scope of its operations.

#### Article 4

##### Cadre Policy Tasks

(1) The Academy is responsible for the development and selection of eminent and internationally renowned research personalities.

(2) In the selection, development and employment of its personnel, the Academy implements the principles of socialist cadre policy. It looks after the technical and politico-ideological further education of the personnel, encourages their creative capacity and safeguards the training of a young creative scientific generation.

(3) The Academy combines the planning and implementation of its research tasks with planned cadre development and encourages postgraduate studies by its scientific personnel. A candidacy in science is in being at the Academy.

(4) The Academy cooperates in the training and education of students and the young generation of scientists at the universities and colleges. It participates in the training of personnel from other social sectors.

## Article 5

### Tasks of Supplies for Research

(1) To enable it to accomplish its tasks, the Academy has a material-technical base which is being developed consonant with the requirements of research and with social possibilities. It encourages the development and manufacture of scientific devices and rationalization aids for research and safeguards the rational use of the manpower, material and financial resources and funds made available to it as planned.

(2) The academy takes care of the availability of scientific literature and other sources of scientific information. To do so, it uses the international resources of science and involves itself in the internal and international exchange of scientific data.

## Article 6

### Planning

(1) The Academy arrives at its tasks from the study of basic social needs, the economic reproduction conditions, the standard and trends of development of science. It plans its tasks and the money and funds required for them as per the legal regulations on the planning of the national economy and the state budget and as per the provisions on the planning of sociological research. It ensures the unity of research and fund planning, the intensive utilization of the research potential and the development of international socialist scientific cooperation, coordinated with its plans.

(2) In joint conceptual work with the State Planning Commission, the Ministry for Science and Technology and other central state organs, the Academy cooperates in the preparation of assignments of the state plan science and technology. It guarantees the priority accomplishment of the tasks assigned it by this plan.

## III.

### Cooperation of the Academy within the GDR

## Article 7

### Cooperation with Ministries and Central Institutions

In the accomplishment of its tasks, the Academy collaborates with the ministries and other central state organs. The Academy's cooperation with central institutions and scientific academies has as its main objective the guarantee of the coordinated preparation and efficient realization of comprehensive research projects and other scientific tasks as well as the broad application of research results.

## Article 8

### Cooperation with Universities and Colleges

The Academy cooperates in the realization of the unity of research, training and further education. It closely collaborates with the Ministry for University and Technical School Affairs, the universities and colleges, and assists instruction, education, training and further education, encourages efficient research and ensures reciprocal support in the utilization of the material resources and data funds.

## Article 9

### Cooperation with Combines, Enterprises and Facilities

The Academy provides an effective contribution to the development of the national economy's output and entertains contractually settled cooperation relations with state owned combines, enterprises and other partners. These cooperation relations concern the drafting of long-range research and development strategies and the intensification of the reproduction process, in particular the creation and utilization of fundamental scientific results for the development of products, technologies and processes. They also serve the development of socialist community work and the expansion of the partners' research and development potentials. These cooperation relations must be used to improve the economic efficacy of the research and revenues of the Academy.

## Article 10

### Cooperation with Local State Organs

The Academy's cooperation with local state organs has the objective of making sure that the Academy's development responds to regional conditions, to provide Academy contributions to the development of the scientific and cultural life in the regions, and to encourage regional rationalization.

## IV.

### International Cooperation by the Academy

## Article 11

### Principles of International Cooperation

The Academy's international relations serve the accomplishment of the tasks assigned it and the advance of science. They are organized in coordination with GDR foreign policy and state decisions as well as on the basis of the respective international treaties. Cooperation with partners in the USSR and other socialist states is being further developed as planned and enjoys special encouragement; it serves the realization of the tasks of socialist economic integration by the CEMA member countries.

## Article 12

### International Socialist Science Cooperation

(1) The scientific cooperation of the Academy with the academies of science of the USSR and other socialist states has the objective, by the processing of common tasks to contribute to the speed-up of scientific and technical advancement and the broad social utilization of the results of research. The Academy concludes agreements to that effect with the academies of sciences of these states.

(2) The Academy participates in scientific cooperation within CEMA.

## Article 13

### International Relations with Scientific Institutions in Nonsocialist States

Within the scope of its tasks and on the basis of equality and mutual benefit, the Academy maintains relations with scientific institutions in nonsocialist states and thereby contributes to the promotion of science and the consolidation of peace. The Academy concludes agreements with scientific institutions in these countries with respect to the organization of such relations.

## Article 14

### Relations with Interstate and Private International Organizations

(1) The Academy assists the competent GDR ministries and other central state organs and institutions with regard to GDR membership obligations in international interstate organizations. It provides scientific contributions and sends out scholars to work in these organizations.

(2) In some fields, the Academy represents GDR science in private international scientific organizations. It is authorized to become a member of such organizations and observe the duties and rights related thereto. The Academy may establish GDR national committees to carry out the coordinating functions arising from membership in private international organizations.

## Article 15

### Involvement in International Research Facilities and Enterprises

(1) The Academy takes part in the establishment and operation of international research facilities. It is entitled to become a member of such facilities and observe the duties and rights involved therein.

(2) To accomplish its tasks, the Academy maintains its own research ships and other plant for scientific oceanography. It participates in international scientific expeditions and enterprises.

V.

Members and Staffs of the Academy

Article 16

General Principles for the Work of Members of the Academy

- (1) The Academy has full, corresponding and external members. Eligible as members of the Academy are scholars who have contributed significant scientific achievements to the advancement of science, the consolidation of peace and social progress.
- (2) Members of the Council of Ministers and full members of the Academy may submit recommendations for the election of new members of the Academy to the president of the Academy.
- (3) Members of the Academy are elected by the plenary session of the Academy; election requires confirmation by the chairman of the Council of Ministers.
- (4) Membership of the Academy may be terminated by decision of the plenary session, if the prerequisites for membership have ceased to exist, or if the respective member of the Academy has committed a gross infraction of membership duties. The termination of membership requires confirmation by the chairman of the Council of Ministers.

Article 17

Full and Corresponding Members of the Academy

- (1) Elected full and corresponding members of the Academy may be nationals of the GDR, who have enriched science and technology by eminent performances and results, exerted decisive influence on their utilization in social practice and thereby earned great merits as regards the advance of science in the GDR. Their membership in the Academy is linked with the appreciation and active cooperation in the accomplishment of the Academy's social assignment stipulated in this statute.
- (2) Full and corresponding members of the Academy are obligated to share in the work of the Academy and provide scientific contributions to the accomplishment of the Academy's assignments, regularly attend meetings of the Plenum and the classes, and to participate in their work by scientific lectures and in other ways. They follow the standard and trends of development in their science and related fields and derive therefrom recommendations for the deepening of the respective scientific discipline. Full and corresponding members receive an allowance for their work at the Academy.
- (3) Full members are authorized to vote in accordance with the provisions of this statute, to participate in decisionmaking in the plenary session, to claim the title "full members of the Academy of Sciences of the GDR" and wear the decorative pin of the Academy.

(4) Corresponding members are entitled to participate in decisionmaking in the plenary session, to claim the title "corresponding member of the Academy of Sciences of the GDR" and wear the decorative pin of the Academy.

(5) The fulfillment of the obligations arising from the membership of full and corresponding members of the Academy is deemed work within the scope of the labor code relationship of the respective member.

(6) Full membership up to age 65 (60 for women) is not to exceed 90. The total of corresponding members is not to exceed 100.

#### Article 18

##### The External Members of the Academy

(1) Scholars who are not nationals of the GDR may be elected external members of the Academy, if they have earned internationally renowned merits for the advancement of science and technology by virtue of their outstanding scholarly performances. External members acknowledge the basic humanist concerns of the Academy stipulated in this statute.

(2) The Academy strengthens its relations with external members by providing information about the scholarly life of the Academy and in other suitable ways.

(3) External members nurture their connection with the Academy. They are entitled to claim the title "external member of the Academy of Sciences of the GDR" and to wear the decorative pin of the Academy.

#### Article 19

##### The Personnel of the Academy

(1) The work of the Academy personnel involves special duties due to the status and the tasks of the Academy in the socialist society; it represents great social prestige. By their personalities, skills and performances, the personnel of the Academy must guarantee that they will conscientiously carry out the tasks assigned them, effectively contribute to the accomplishment of the Academy's social assignment and coordinate their entire behavior with the responsibility held by the Academy.

(2) The personnel of the Academy are obligated by their initiative, creativity and readiness to perform and assume risks, to promote the scholarly work of the Academy, in particularly its research, to participate in the transfer of research results to social practice, and to contribute to the improvement of the Academy's social efficacy and its reputation. They cooperate in the Academy's management and planning operations.

## VI.

### The Structure of the Academy

#### Article 20

##### The Plenum

(1) The Plenum of the Academy is the plenary assembly of the Academy's full and corresponding members. At the invitation of the chairman, guests may attend the discussions of the plenum.

(2) The Plenum discusses fundamental scholarly problems arising from the general advance of knowledge, the greater sophistication and integration of the sciences and the use of science in social practice. The plenum encourages links between the scientific disciplines. It contributes to the encouragement and organization of science, technology, education, culture and health care in the developed socialist society and to the nurture of progressive traditions in science. The plenum ascertains trends in scientific development and assists the elucidation of cross sectional problems. It issues recommendations on basic issues and interdisciplinary problems of scientific development and deals with lectures by Academy members on their own research. The plenum encourages scientific and cultural life in the GDR as well as the spread, popularization and utilization of new scientific findings. The results of the discussions at plenary sessions are published in a suitable form.

(3) The plenum elects new full, corresponding and external members of the Academy and issues recommendations for the appointment of the president, vice presidents and general secretary of the Academy. The plenum also decides the termination of membership in the Academy.

(4) The plenum decides the award of distinctions by the Academy. The plenum is informed of the proposed appointment of scientific employees as professors.

(5) The full members of the Academy have the right to vote in the plenum.

(6) Elections and decisions as per Paragraph 3 are conducted and completed by a simple majority of the full members attending the plenum. Elections take place only if more than half the full members are present at the plenary meeting. Full members who are prevented from attending the election session, may exercise their right to vote by mail; they are deemed to be present at the election session.

(7) Resolutions as per Paragraph 4 are adopted by a simple majority of the full and corresponding members attending the plenary session. The plenum is deemed to have a quorum if more than half the members are present. Full and corresponding members who are prevented from attending the respective session, may exercise their voting rights by mail; they are deemed to be present at the respective session.

## Article 21

### The Classes

- (1) The classes of the Academy are working bodies composed of the full and corresponding members of one or more scientific disciplines.
- (2) Each full and corresponding member belongs to one class. The work of each class is directed by the class chairman, one of its full members. On the recommendation of their classes, the president of the Academy appoints the class chairmen for 4 years; they are responsible to him for the work of the classes. Guests may attend class discussions at the invitation of the chairman.
- (3) The classes discuss basic issues involving the development of their disciplines and the adjoining scientific disciplines as well as interdisciplinary relations. The classes contribute to the deepening of scientific theory in the respective disciplines and to interdisciplinary linkage. They draft recommendations on the selection and promotion of important research assignments and methods, and to the social utilization of scientific results. The classes deal with proposals regarding the election of new members of the Academy and with scholarly reports by their members.
- (4) Each class cultivates links with the other classes of the Academy, the scientific councils and societies attached to the Academy and to scientific advisory bodies of other social sectors. The classes help research departments and institutes to carry out their tasks. The working results of the classes are published in a suitable form.

## Article 22

### Research Sectors

- (1) Combined in research sectors are institutes which carry on research in the same or related scientific fields.
- (2) Research sectors draft long-range strategic bases for their fields and coordinate research in these fields within the Academy and with the social sectors affected. Consonant with the principles of socialist intensification, they develop the capacity, standard of output and social efficacy of research at their institutes and endeavor to ensure that research results are made available as per plan and in response to the needs and conditions of social development, and that they are transferred to social practice. The research sectors direct the domestic cooperation relations and the international cooperation of the institutes merged in them.
- (3) Research sectors are established, reorganized or dissolved for reasons of the scientific division of labor and in response to long-term social and scientific demands on the organization of the Academy's research potential. The Council of Ministers decides the establishment and dissolution of research sectors.



## Article 23

### The Institutes

(1) The central institutes, institutes, research agencies and other scientific and scientific-technical facilities of the Academy (collectively called institutes) are the research agencies of the Academy, where staff collectives collaborate in the fulfillment of plan tasks. They implement the unity of theory and practice in science in the course of working on research tasks, developing research methods and using the results of research.

(2) The institutes carry out conceptual work in preparation of their research tasks and carry on research with the aim of providing outstanding scientific results and top performances. They safeguard the comprehensive protection of their research results and, jointly with their cooperation partners, transfer them to social practice.

(3) For the preparation and accomplishment of their tasks, the institutes maintain cooperation relations with other Academy institutes and facilities as well as with state owned combines, enterprises and other partners in the GDR. The institutes develop their international cooperation primarily with partners in the USSR and other socialist states; they encourage the foreign trade utilization of their scientific-technical and other output and results.

(4) Institutes are established, reorganized or dissolved in response to long-range social and scientific needs. The assignments, structure and method of operation of the institutes are prescribed in institute codes.

## Article 24

### The Service Facilities

(1) The service facilities of the Academy are facilities for research supplies, which contribute to the rationalization of research in territorially neighboring institutes by concentrating on procurement.

(2) The provision of Article 23 Paragraph 4 applies mutatis mutandi to the establishment, reorganization and dissolution of service facilities. The assignments, structure and method of operation of service facilities are prescribed in codes.

## Article 25

### The Scholarly Societies

Scholarly societies which have their own legal entity, are attached to the Academy. The Academy directs the scholarly societies in the drafting of their objectives, advises them on issues of science policy and supervises the observance of their statutes.

## VII.

### Management of the Academy

#### Article 26

##### The President

(1) The president directs the academy on the principle of one-man management combined with the collective discussion of fundamental issues and the comprehensive collaboration of members and staffs of the Academy. He is responsible to the Council of Ministers for the achievement of the objectives and tasks of the Academy. The president is subordinated to the chairman of the Council of Ministers and reports to him.

(2) The president directs the work of the presidium and the council, and he chairs the plenary sessions of the Academy. The president is in charge of the planned development of the work of Academy's classes. On the basis of presidium resolutions, he decides on the establishment and dissolution of institutes and facilities, classes and scholarly councils at the Academy. The establishment and dissolution of scientific institutes requires confirmation by the presidium of the Council of Ministers.

(3) Following collective discussions by the presidium or the plenum of the Academy, the president makes the provisions necessary for the development and organization of research and scientific life; he decides the long-range objectives and tasks for the work of the Academy. He makes sure that socialist cadre and educational policy is carried out at the Academy and safeguards the planned development of working and living conditions. In collaboration with the plenum, the president provides for the development of the Academy's membership consonant with scientific and social circumstances.

(4) The chairman of the Council of Ministers appoints the president for a 4 year term. The plenum of the Academy submits recommendations to the chairman of the Council of Ministers for the appointment of the president.

#### Article 27

##### The Presidium

(1) The presidium of the Academy discusses the preparation of fundamental decisions to be made by the president with regard to the long-range scientific development and research strategy of the Academy as well as the organization of scholarly life at the Academy and the work of its scholarly bodies, research sectors and institutes. The presidium discusses the recommendations of the Academy on GDR scientific strategy, the preparation of conferences and recommendations of the plenum and the development of the Academy's international relations. It adopts resolutions on the draft of the comprehensive plan of the Academy and the establishment and dissolution of institutes and facilities, classes and scholarly councils of the Academy.

(2) The presidium exercises the function of a scientific advisory council for the award of Academic degrees in accordance with legal regulations.

(3) The presidium is composed of the president, vice presidents, general secretary, managers of the research sectors, chairmen of classes, secretary of the presidium and other persons appointed by the president.

(4) The first secretary of the SED kreis leadership organization at the Academy is member of the presidium.

(5) Membership of the presidium is not transferable.

#### Article 28

##### The Council

(1) The council of the Academy is the advisory body of the president for the preparation of presidential decisions on the drafting of Academy plans, the safeguarding of plan implementation, the supervision of plan fulfillment and reporting thereon as well as the development of the cadre potential, the organization of domestic and international cooperation relations of the Academy and measures for the enforcement of socialist law.

(2) The council is composed of the president, vice presidents, general secretary, managers of research sectors, secretary of the presidium and directors of special spheres of responsibility.

(3) The first secretary of the SED kreis leadership organization at the Academy is member of the council.

(4) The chairman of the kreis executive board of the Science Trade Union at the Academy and the first secretary of the FDJ kreis leadership organization at the Academy are members of the council.

(5) Membership of the council is not transferable; in case of unavoidable absence, members of the council may send a delegate in their place.

#### Article 29

##### The Vice Presidents and the General Secretary

(1) Vice presidents and the general secretary assist the president of the Academy in the exercise of his management functions.

(2) The first vice president of the Academy is the permanent deputy to the president. In the absence of the president, he takes over his tasks, powers and duties. As the president's representative, the first vice president is also responsible for the coordination of analytical-prognostic work, planning and the domestic cooperation relations of the Academy.

(3) In his capacity as representative of the president, the general secretary is responsible for the development of international socialist scientific

cooperation and the other international relations of the Academy in coordination with GDR foreign policy, state decisions and international treaties. He supervises the fulfillment of the Academy's international obligations.

(4) As the representative of the president, one vice president is responsible for the sector of social sciences and its planned development consonant with the resolutions of the Socialist Unity Party of Germany.

(5) As the representative of the president, one vice president is responsible for issues involving scholarly life and the scholarly societies, for the publishing operations of the Academy and the encouragement of the young generation of scientists.

(6) Yet another vice president may handle other spheres of responsibility, which require the president to be represented. The Council of Ministers decides this point.

(7) The president of the Saxon Academy of Sciences at Leipzig is an ex officio vice president of the Academy.

(8) The chairman of the Council of Ministers appoints the vice presidents and the general secretary for a 4-year term. The Plenum of the Academy submits the appropriate recommendations to the chairman of the Council of Ministers.

#### Article 30

##### The Managers of the Research Sectors

(1) The managers of the Academy's research sectors are appointees of the president and represent him with regard to the coordination and supervision of research in various fields of science and the uniform management and planned development of the institutes and facilities merged in the research sectors. They manage the research sector on the principle of one-man management and collective discussion. The managers of the research sectors are responsible to the president of the Academy for the accomplishment of the tasks assigned the research sectors and must report to him.

(2) The managers of the research sectors guarantee the achievement of the research strategic objectives, the drafting and defense of the plans of the institutes subordinated to the research sectors, the concentrated and rational deployment of research capacities, the selection and distribution of cadres consonant with the principles of socialist cadre policy and the needs of research, as well as supervision of plan fulfillment; they receive the reports of the directors of the institutes.

(3) In the discharge of their duties, the managers of the research sectors rely on scientific advisory councils. They ensure their cooperation with the classes of the Academy and other scholarly bodies as well as the scholarly societies attached to the Academy. On the recommendation of the manager of the respective research sector, the president decides the composition

of the scientific advisory councils. The managers of the research sectors are assisted by deputies in the exercise of their management functions.

(4) The president appoints the managers of the research sectors and their deputies for a term of 4 years.

#### Article 31

##### The Directors of the Institutes

(1) The directors of the institutes of the Academy manage the institutes on the principle of one-man management and collective discussion. They are responsible to the president and managers of the competent research sectors for the fulfillment of the tasks assigned the institutes and must report to them.

(2) The directors of the institutes guarantee the analytic-conceptual preparation of scientific tasks and their planning, the fulfillment of plans with outstanding scientific results and top performances, the utilization of the capacities available to the institute in accordance with the needs of socialist intensification as well as the development and training of the personnel consonant with the principles of socialist cadre policy and the efficient deployment of the personnel.

(3) In the accomplishment of their tasks, the directors of the institutes are assisted by scientific advisory councils. The manager of the competent research sectors decides the composition of the scientific advisory councils at the recommendation of the director concerned. The directors are assisted by deputies in the exercise of their management functions.

(4) On the recommendation of the manager of the competent research sector, the president of the Academy appoints the directors of the institutes for a 4-year term. On the recommendation of the director of the respective institute, the manager of the competent research sector appoints the deputies to the directors, also for a 4-year term.

(5) The provisions of Paragraphs 1-4 apply mutatis mutandi to the directors of other Academy facilities.

#### VIII.

##### Rights of the Academy

#### Article 32

##### Award of Academic Degrees

(1) Consonant with the fields of science represented in it, the Academy awards the academic degrees

- "Doctor of a branch of science"
- "Doctor of Sciences."

(2) The Academy awards academic degrees as per the legal regulations issued to that effect.

#### Article 33

##### Appointment of Professors

(1) The Academy is entitled to designate professors the scientific employees of the Academy, who have produced important achievements with regard to research and the application of research results in social practice, and have demonstrated their ability to train and educate the young generation of scientists and to direct collectives.

(2) The designation "professor" is awarded by the president of the academy as per the procedural system enacted in coordination with the Minister for University and Technical School Affairs.

#### Article 34

##### Award of Distinctions by the Academy

(1) The Academy awards

- The honorific clasp of the GDR Academy of Sciences in appreciation of exceptional merits in the promotion of the sciences, the mobilization of their results for the preservation and consolidation of international peace and the social progress of mankind,
- The Helmholtz Medal of the GDR Academy of Sciences and the Friedrich-Engels Prize of the GDR Academy of Sciences in appreciation of pre-eminent scientific achievements,
- The Leibniz Medal of the GDR Academy of Sciences for significant scientific achievements with great social or economic impact,
- The Johannes Stroux Medal of the GDR Academy of Sciences in recognition of many years of exemplary achievements in the fulfillment of Academy assignments, and
- Distinctions for outstanding achievements in various disciplines, by which an important contribution is made to the organization of the developed socialist society in the GDR.

(2) The president of the Academy awards the distinctions as per Paragraph 1 consonant with the regulations established in this connection.

#### Article 35

##### Publications

(1) The academy publishes reports on the results of its scientific studies and research, the discussions of the plenum, the classes and other scholarly

bodies and the science events conducted by it as well as on its operations as a scientific institution of the GDR. The research sectors and institutes of the Academy are entitled to publish series, sequels and periodicals. The president of the Academy decides the kind and size of the publications of the Academy and its facilities and bodies.

(2) The Academy is entitled to have its publications issued by its own publishing house. The Akademie-Verlag Berlin and state owned printing plants are subordinated to it.

(3) Publications by full and corresponding members and employees of the Academy must be of a standard according with the high social status and responsibility of the GDR Academy, promote the reputation of the GDR and the Academy and observe the need for protecting the socialist society, scientific work and its results from injury. Employee publications having to do with their work at the Academy, are subject to approval.

#### Article 36

##### Events

(1) In order to carry out its scientific and science-policy tasks, the Academy conducts conferences, meetings and other scientific events of a domestic or international nature.

(2) In honor of Karl Marx, the Karl-Marx lecture is offered each May as a special scientific event organized by the Academy.

(3) In honor of the Academy's founder, a Leibniz Day is arranged each July as a festive assembly of the Academy. This assembly serves the public reporting on the work of the Academy and the introduction of the newly elected members of the Academy; a special scientific lecture is included in the proceedings.

(3) Academy distinctions are awarded within the framework of the Karl-Marx lecture and the Leibniz Day.

#### Article 37

##### Record Keeping and Preservation of the Cultural Heritage

(1) The academy collects and maintains cultural and documentary records relating to the development of science and technology and the history of the Academy.

(2) The Academy has at its disposal central archives which, within the framework of central record keeping, are competent as the final archives for all the records of the Academy. They are entitled to accept and preserve materials inherited from members of the Academy and other personalities of scientific and cultural life.

## Article 38

### Foundations and Endowments

Attached to the Academy are foundations and endowments which are competent to contract though not legal personalities. The Academy is authorized to accept and administer endowments for scholarly purposes.

## IX.

### Representation of the Academy in Legal Affairs

## Article 39

### General Principles

- (1) The president represents the Academy in legal affairs, the first vice president does so in the absence of the president.
- (2) The vice presidents, general secretary and managers of the research sectors are authorized to represent the Academy in legal affairs within the sphere of their responsibilities.
- (3) The directors of the institutes and facilities of the Academy are authorized to represent the Academy in order to accomplish the tasks assigned in the institute regulations and within the scope of the institute plans.
- (4) Other managers and employees of the Academy or other persons may be authorized to represent the Academy in legal affairs. Authorizations must be issued in writing.

## Article 40

### Special Provision for Representation in International Affairs

- (1) The president or general secretary alone represent the Academy in international affairs.
- (2) Other managers and employees of the Academy or persons are authorized to represent the Academy in international affairs only if they have been issued the relevant authority by the president or general secretary. Authorizations must be issued in writing.

## X.

### Implementing and Concluding Provisions

## Article 41

### Standing Orders and Rules for Special Fields

- (1) In order to carry out this statute, the president issues the standing orders of the Academy.



(2) The president issues instructions and rules for the normative regulations required to carry out and use legal regulations in the sphere of the Academy and for the efficient organization of operational processes.

#### Article 42

##### Concluding Provisions

(1) Complementations, amendments and the cancellation of this statute require a resolution by the Council of Ministers.

(2) This statute takes effect on 1 July 1984.

(3) Losing effect at the same time are:

-- The Decree of 20 May 1969 on the Statute of the German Academy of Sciences at Berlin (GBI II No 49 p 317),

-- The Decree of 26 September 1972 on the Academy of Sciences of the GDR (GBI II No 58 p 673).

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PROBLEMS REPORTED IN RAIL, FERRY LINE CONSTRUCTION

Bonn DIE WELT in German 18 Jul 84 p 4

[Article by T. W. Krauel: "Soft Ground Threatens the Mukran Ferry Port with a Debacle; Turning Over of the Prestige Project Endangered by Faulty Ground Survey Work?"]

[Text] It seems more than doubtful that the Mukran railroad ferry port on the island of Ruegen will be completed on schedule in October 1986. A report which appeared a short time ago in NEUES DEUTSCHLAND at the midway point of construction concerning this infrastructure project, presently surpassed in scope in the GDR only by the electrification of the Reichsbahn, indicates in optimistically glossy terms that there are serious problems with the subsoil.

The dimensions of the construction site are impressive: The outer jetties of the port measure almost one and one half kilometers in length. The port contains around 40 kilometers of track which will support the unloading and switching or transshipment of the more than 100 freight cars carried by each of the six 12,000 metric ton ferries. An initial transshipment capacity of 5.3 million tons of freight is planned by the end of the decade. This goal, however, is still far from becoming a reality.

Although part of the jetty and some of the service buildings have already been built and some of the track has been laid, the party newspaper openly addressed the construction problems in a manner which was highly unusual for the GDR. One whole page was devoted to a description of the apparently very difficult technological problems with the subsoil encountered by the 2200 Mukran construction workers.

According to the site supervisor, the construction brigades found thick chalk strata during excavation work. In a very time-consuming effort, suitable foundations for these subsoil conditions were placed under the port buildings. Most of the chalk, however, had to be excavated and filled in with gravel. For this reason, the party newspaper continued with the required optimism, a tiny gravel pit in nearby Dubnitz "had now become a true stip mine." In addition, a GDR Reichsbahn expert called the gravel from Dubnitz "not ideal", and said it is only being used because it can be mined for "millions of marks" less than other materials. Interpretation: Even filling the soft ground with low-grade material is costing the GDR at least tens of millions of marks.

The transport ministry in charge of the project had firmly backed the selection of the Mukran site during the planning phase after Glowe, the site originally favored according to information from those familiar with the area and located between Sassnitz and Kap Arkona, had been dropped from consideration. The bottom of the Baltic Sea drops off sharply at the Mukran site, the ministry argued, and a channel for ferry traffic would therefore neither have to be dredged nor maintained; a connection point to the Reichsbahn railroad system already existed; and finally, due to the rocky beach, there are few vacationers.

But was the subsoil at the proposed site adequately investigated? It appears there are those in East Berlin who doubt it, and who are anxious to see the results of such inadequate procedures published. The critical construction report had no sooner appeared than the two highest ranking members of the GDR military, Defense Minister Hoffmann and his deputy Heinz Kessler, praised the achievements of the "construction soldiers" for the first time since their inception in 1964--and this at the "large-scale construction site of German-Soviet friendship." Approximately 160 men from these unarmed construction units made up of conscientious objectors are at work at the Mukran site. Even this virtual "chain gang" unit had praise heaped upon it from the highest echelons for the fulfillment of its construction tasks. There may have been other reasons which also played a part in the selection of this site from all possible places for such a show of praise, however one thing is certain--the choice was no accident.

Aside from the technical problems, one of the last remaining untouched stretches of the German Baltic coast was sacrificed for the construction of the port. This area is populated by wild orchids, and even directly within the site area itself a rare phenomenon of natural beauty unique in all the world was permanently erased: an expansive field of pure flint.

This would not be the first time in the socialist world that a large-scale project suffered damage as a result of inadequate preparatory work. In China an ultramodern steel mill near Shanghai was erected on marshy ground and had to be supported by steel beams imported at a cost of millions of dollars. The minister in charge was transferred. In the Soviet Union the nuclear power plant factory "Atommmash", a significant propaganda source, was the victim of similar bungling, and the minister in charge was fired.

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## KOPATSY BOOK ON LACK OF ENTREPRENEURSHIP DRAWS CRITICISM

Budapest KOZGAZDASAGI SZEMLE in Hungarian No 6, Jun 84 pp 714-723

[Review by Dr Tamas Prugberger, Candidate of State and Legal Sciences and Research Associate at Cooperative Research Institute, of book "Enterprise: a Scarce Article" by Sandor Kopatsy, Kozgazdasagi es Jogi Konyvkiado [Economic and Legal Publications], 1983; "On the Reform of Our Economic Structure--Comments on Sandor Kopatsy's Book"]

[Text] The past years' deteriorating foreign and domestic economy made economists more and more aware of the necessity for the continuation of the economic reform that was started in 1968 and stopped in the mid-1970's, and even for a still more radical, new reform (15). The newest and comprehensive solutions for changing the economic and enterprise structure as well as the economic management system were sketched by Tibor Liska (4), Marton Tardos (29), Laszlo Antal (1), Tamas Bauer (5) and Sandor Kopatsy in his new book. In addition, there is Tamas Sarkozy's structural proposal that also includes his proposal for the reform of the legal system related to the change in the economic structure ((22), (23), (24)). Almost all proposed systems put the cooperative sector rather in the background. This applies to Tibor Liska's conception as well, although this system, i.e., the competitive enterprise application, appeared in its pure form and as an experiment, precisely in the agricultural cooperatives (31). Tamas Bauer is the only one who assigns an important role to the cooperatives in the reform's new enterprise system, namely, he gives part of his new enterprises to the cooperative ownership of the working collective ((5), pp 61-62). This conception also appears in the study draft that includes both Tamas Sarkozy's conceptions worked out in 1983 and the ones mentioned here. Thus, part of the enterprises established by the state are given right away to the working collective for an autonomous operation, creating a so-called autonomous enterprise (which are related to the cooperatives). In this new study draft--at the influence of Tamas Bauer, as admitted even by the author Tamas Sarkozy--the cooperative form as an enterprise model was greatly emphasized ((25), pp 81-87). At the same time, Marton Tardos's and Sandor Kopatsy's organization of state ownership is also included. It is a strength of the draft that it sketches an enterprise model system which combines the various conceptions and which wants a simultaneous operation of several types of enterprise, following the changes in our economic life. The reason why I think the basic conception behind this is right is that it begins with the

premise that the economy must include several forms of enterprise, every-day economy being the judge as to which form will be more or less needed.

Thus a diversified enterprise model must be made (and a comprehensive and unified enterprise law, which includes every economic management system, must be created, resembling the trade law of 1875) which includes all state, cooperative, private and associative management systems. There is only one criterion that should be emphasized, namely, that none of the forms of enterprise listed here should be allowed to make profit without work, through the exploitation of others.

To some degree, Sandor Kopatsy's recent book, "Enterprise: a Scarce Article," contradicts this enterprise diversification. This book shows in a convincing way what distortions resulted from the Hungarian economic policy that forced enterprise mergers both before the beginning of the 1968 reform and in the period of 1973 to 1978 when the reform was halted. As a result of the repeated mergers in the state enterprise and cooperative sector, the medium-size and small enterprise, fulfilling the need for a background industry and service, vanished.

The author is also right in showing that all of this is connected with the interests of the bureaucratically centralized and direct management, for this way the economic management does not have to "put up with" as many enterprises. Kopatsy is also right in that such distortions can be avoided only by a consistent separation of owner and branch supervision. That is, branch management organs should not be allowed to exercise owner supervision of enterprises. Legally, this was essentially accomplished from 1968 in the case of the cooperatives; in fact, however, there was a certain regression from 1970 as a result of the branch supervisory organs' unlawful practices. However, the function of owner and branch supervision, in the case of the cooperatives, remained separated during this period, as cooperative owner autonomy and legal and branch/economic supervision has been effectively separated from 1968, i.e., 1971, as a result of the cooperative law and the branch (primarily agricultural) cooperative laws. The former belongs to the sphere of cooperative autonomy, the latter to that of official jurisdiction, as opposed to the supervision of state enterprises where the two are still anachronistically combined today.

This was one reason why it was possible in the 1970's to slow down the 1968 reform through informal means and to begin with a regression more efficiently in the sphere of state enterprise than in the cooperatives. In spite of this, the cooperatives also showed such tendencies; however, they could be effected only through open or covert violations of the law and through an extension of the branch/professional supervision to the sphere of owner autonomy.

Direct interference with economic policy and management, which disregarded the objective laws of the economy and which was implemented in an informal way, detrimentally affected both sectors and distorted their activities. This applied to the economic associations, too, which connected the two spheres; in their case, owner management and official supervision are

separated both by necessity and by law. Considering all of this, Sandor Kopatsy gets the credit for systematically collecting, within the framework of a monograph, the Hungarian economy's negative phenomena which were discovered in various studies by him and partly by other researchers and which can be traced back to the pre-1968 formal and the 1970's' informal direct economic management. However, these negative phenomena were detrimental not only for the sphere of state enterprise and its management but also that of the cooperatives; unfortunately, Kopatsy does not deal with this in enough detail. For this reason, it might be beneficial to show to what extent his statements are valid in the sphere of the cooperatives.

On the basis of an extensive international comparison, Kopatsy shows that, regarding its size, the average socialist enterprise significantly exceeds the enterprise of the developed capitalist countries. Even among socialist countries, the centralization of Hungarian enterprises is the greatest, exceeding not only the Bulgarian but also the Soviet index (pp 79-80). We mention these two countries because comparative statistical data of a 1978 analysis (prepared by the Main Department of Cooperative Policies of the Ministry of Agriculture and Food Industry) shows that, as a result of the 1970's' campaign for cooperative mergers, such gigantic cooperatives were created in Hungary that they exceeded the average size of the Soviet collective farms. (33) (The paradox of the situation becomes more apparent in comparing the two countries' geographical size.) The reason for mentioning Bulgaria is that their county-size specialized agricultural/industrial complexes, created in the 1970's by nationalizing the farming cooperatives and by merging them with state farms, exceed even the size of the Hungarian agricultural enterprises by far. The large geographical size significantly increased the costs of intraenterprise transport of goods and machines as well as of management in both countries and, in Bulgaria (because of specialized production), even the costs of domestic transport and distribution (11). Kopatsy is right in showing in this regard that only the system of household plots and supplementary farms (which is much more extensive than in the other socialist countries) is the one that raises Hungarian agriculture above average (p 89). It seems that this, too, speaks for the future of the highly concentrated but micro-sized West-European and North-American system of family farm, as a result of a much more flexible labor and farm management that is conscious of ownership.

The detrimental consequences of concentration in Hungarian industry and trade, as shown by Kopatsy, also affect the cooperative sphere of industry and consumption/marketing. As a result of cooperative mergers and profile clean-ups, which were forced here, too, the quality of consumer service decreased; there were also disruptions in the material supply needed for the services (19). Kopatsy is also correct in that the lack of small enterprises created significant tensions in our country. For the sphere of large enterprise is suited primarily for meeting universal mass demand while only the smaller enterprises are capable of meeting demands that are becoming more and more individual as the living and cultural standard increases. According to Kopatsy, the fact that enterprises stopped growing and that the small enterprise is beginning to prevail, is related to this. On the other hand, enterprise concentration is still going on in the European socialist

countries (although sociologically similar phenomena are apparent) and the theoretical representation of concentration is still strong.

No doubt a significant step has been taken in Hungary toward stopping centralization and a certain decentralization. This is shown by the increasing significance of household plots and supplementary farms, also emphasized by Kopatsy, and the fact that the cooperatives are playing an ever larger role of acquisition/marketing and integration in connection with these farms and reformed special groups of agricultural production. A similar activity is also apparent in the special groups of industrial production recently institutionalized in the industrial cooperative branch. Of course, it would not hurt to extend acquisition/marketing, similarly as it has been done with the household plots, to members of industrial cooperatives who have a license to be engaged in homecrafts after work. In addition, it would be worth it to think about how the present industrial cooperatives can develop an activity of acquisition/marketing, to which the independent craftsmen would be connected through a special membership. The contract operation system, which is essentially based on Liska's conception and which implements enterprise (internal) decentralization, increased the quality of management and the amount of revenues, coming closer to meeting consumer demand both in the state and cooperative trade industry and the catering industry. The purpose was similar when economic policy makers and lawmakers institutionalized the form of the small industrial cooperative and thus made the process of licensing individual activity in industry and trade easier.

In spite of all this, stated even by Kopatsy, there are still too few small and medium-sized enterprises and, consequently, small-volume and sometimes individual consumer demand is inadequately met.

Related surveys show (corroborating Kopatsy's) that most new small industrial cooperatives and trade groups as well as the economic work collectives are active in home and background industry supporting large enterprises, or work on the order of public institutions. The same applies to a significant part of individual small tradesman's activity. Consequently, the few small and individual enterprises which are set to meet consumer demand, in the absence of competition, have a monopolistic control of the market. The situation is similar in the sphere of large and medium-size enterprise where, in opposition to the 1968 concepts of reform, there is a one-channel system and a compulsive contract system still existing in many respects; this makes competition for the market impossible. It was appropriate for Kopatsy to give the title to his book, "Enterprise: A Scarce Article."

In looking for a way how this could be helped and how the Hungarian enterprise and economic structure could be reformed this way, first we must emphasize, following the order of discussion of Kopatsy's book, the necessity of changing the economic management. The author's related theses correspond with my own concepts. The origin of the overcentralization of enterprise structure is to be found, first of all, in the overcentralization of enterprise department management already mentioned, which combines, in every sector of the national economy, departmental and branch supervision within a single organization. For this reason, an efficient, consultative and

stable administration, indispensable in a modern and indirect economic management, cannot be adequately developed within branch supervision. This is why it is justified to separate government and enterprise activities. Another manifestation of the concentration of power and jurisdiction within the framework of branch supervision is the connection with the general legal supervision in the non-state enterprise sphere and with the owner supervision (which also include the above) in the state enterprise sphere. Kopatsy is right in pointing out that the first thing to do is to eliminate this connection with branch supervision. In studying the state supervision of the cooperatives, I myself also arrived to a similar conclusion ((17) pp 152ff).

From this point on, however, our views differ. For Kopatsy recommends the separation of the rights of owner supervision, giving a recipe only for the elimination of the concentration of branch management affecting only state enterprises. According to this concept, special organs of property management (kinds of holding) should be set up in this area, which would function as owners of state enterprises and as owner-supervisors of managers. Just as in capitalism the holdings function by acquiring banks operating as stock corporations as well as acquiring and circulating company stocks (i.e., by activities on the capital market) and, in the possession of stocks, by company supervision, after changing the socialist state enterprises into stock corporations and sharing the stocks equally among about 10 operating banks, these banks also have the owner's rights to supervise state enterprises. In addition, they could freely circulate the stocks of state enterprises among themselves, the stock exchange rate reflecting the enterprises' market value, i.e., effectiveness. This is how the operating organization would find out when it must, as a stockholder, confront the manager. (pp 263ff). This is how Kopatsy would separate owner supervision from branch supervision of state enterprises.. However, he does not give an answer as to where he puts the legal supervision of enterprises. This cannot be expected from him, of course, for this will have to be solved not by economists but by legal attorneys. (For this reason, also considering Tamas Sarkozy's proposal, I will try to give an answer to this at the end of this paper.) This is why I will not ask the author why he separates indirect branch supervision/management from the activity of local authorities. (I will try to give an answer to this.)

I would much rather reproach the author for limiting the reform of branch management/supervision, connected with the supervisory rights of owners and "quasi-owners," to the sphere of state enterprise. True, he wants to socialize the stocks of the operating organizations at a later stage of the development, in order to allow private individuals to become stockholders as well. Such a possibility, however, is not raised in other spheres of socialist ownership. The author disregards the form of cooperative, together with other forms of autonomous enterprise.

Let us look first at worker autonomy. According to Kopatsy, the most apparent weakness of worker autonomy is that, in the case of an economic unit that is larger than the family, the worker will not accumulate at the expense of his income (p 224). For this reason, we must reckon with two negative phenomena in connection with the combination of the function of the owner



and that of the worker in communities larger than the family: a) "enterprise interest in accumulation decreases"; b) "inflation increases as a result of wage outflow." Kopatsy is led in this by the assumption of the a priori thesis that only the owner is willing to optimally guard enterprise assets and to invest even at the expense of his own living standard. However, according to economic-sociological and psychological studies, this is hardly so in practice. The history of economy clearly proves that, in addition to close economic bounds, mutual trust and dependence based on friendly and long cooperation in profession and trade was always very significant. This is one reason why non-family companies and public associations were able to function effectively already in classical capitalism. And, with regard to today's advanced capitalism, the Israeli kibbutz and moshav, the farming cooperations of southern France that combine 3 to 5 family farms (12), the land leasing and land worker cooperatives of southern France (13), the Japanese farming cooperatives of the younger generation that are efficient and thus proliferating (28), or the French industrial cooperatives (30), are operating profitably. In addition, in today's France the attempts of plant close-downs, resulting from a desire to make a better use of capital, are bridged over by selling them to collectives of workers and employees (through long-term credit with no or little interest) who in turn continue operating them in the form of a cooperative, organized through their own company autonomy (32). I think these facts contradict the author's statement that the cooperative as a form of enterprise is an outdated institution in the modern capitalist economy and that it can prosper in the socialist economic system only because the state enterprise is even more inflexible and rigid as a result of its dependence from central management and its own over-centralized and overly bureaucratic internal organization (pp 222-230). I agree, of course, that the large-scale enterprise mergers destroyed even the internal organization of the cooperatives, diluting their characteristic meaning of cooperative and enterprise. For this reason, the characteristic economic democracy and autonomous enterprise based on membership, should be restored and--in contradiction to Kopatsy's concept--this should also be the model for the reform of the state enterprises' internal organization and system of autonomy.

Consequently, I think it would be appropriate if the state (in concurrence with Tamas Bauer's proposal, and on the basis of the French model mentioned above) would transfer the ownership of those of its enterprises to the cooperative of the work collective which could become more efficient that way (15), or if the state would (according to Sarkozy's "compromise") give some of its enterprises to the workers collectives for autonomous ownership and operation (25). This takes us back again to worker autonomy which, according to Kopatsy, is without perspective. The experience of the French form of cooperative worker autonomy, known from Karl Zehetner's interview-surveys, do not support what Kopatsy categorically states in his book, namely, "...if the workers cannot divide the profits among themselves, then they will not try to increase these profits," and thus "the enterprises' sources of accumulation become gradually depleted." (p 225) I think it is a question of intelligence to determine how much the workers can divide among themselves and how much must be set aside for maintaining and increasing (developing) production--which is, in the final analysis, the guarantee

for their future existence. According to Karl Zehetner's interviews, this is recognized by the workers of the cooperatives that were established from French capitalist factories slotted for closing. (17) It was the same recognition to which the members of some self-accounting units of the Silver Spike Cooperative of Baksa arrived. The work collectives of these decided, by their own initiative, to divide less than allowed and to set aside more than prescribed, knowing that this will lead to higher profits in the following year that can be divided. (18)

In this connection I do not agree with Kopatsy's thesis that "...the workers are less interested in having more voice in enterprise management or the use of the profits than in higher income" (p 224). In contrast, I think that, in spite of great economic problems, Yugoslavia still has less political tension because worker autonomy acts as a release valve. The main flaw of the Yugoslavian economic system, I think, is not the associative structure of work organization based on workers' autonomy but the fact that the orientative planning of the national economy (which is absolutely necessary for avoiding economic anarchy but which is lacking) (7) is substituted (similarly to the way it was done in Hungary during the 1970's) by economic policies and government measures that periodically change between being local/regional and being central and direct, implemented in an informal manner. This is the way in which social and state organizations interfere more and more regularly with the internal life of the associated work organizations, limiting workers' autonomy (27). This is the reason for the fact, too, that the local organization of associated work has a spontaneous form of citizen foundation only in principle (23). If this form would be implemented in practice, there would also be much less unemployment that can be traced back to the reluctance of the work collectives of the local organizations to accept new members. (14) This is why an economic policy and laws are needed which support the foundation of cooperative enterprises. Domestic conditions have been greatly improved in this regard but there are still many possibilities to increase flexibility.

This especially applies to the foundation of small cooperatives. For the 1981 resolution of the Council of Ministers (No 25), which deals with small cooperatives, does not make the foundation of small farming and acquisition/marketing cooperatives possible.\* Yet, the small cooperative of agricultural acquisition/marketing would be viable in Hungary, too, and, in industry, small cooperatives could help small tradesmen in material supply and in marketing their products. For the continuous work organization of "hobby" gardens and supplementary small farms could be greatly helped by small agricultural cooperatives in which a small number of farmers would coordinate the special work phases in line. It is thus desirable to eliminate the present limitations in this area as soon as possible.

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\*In neighboring Austria, several acquisition/marketing and consumer cooperatives were founded recently which operate a few (4-6) stores in cities or small regions. These stores buy, without industrial interference or artificial processing, natural and fresh produce from member farmers which they in turn sell in their stores. According to data published, their operation is promising (26).

Returning to the conception of Kopatsy, I do not reject, even on the basis of the above, his proposed system of an independent owner organization (holding) but I stand against its absolutization. I disagree with the assertion that the coupling of the owner's and operator's function is impossible beyond the family. I think this coordination is also possible in the case of workers' collectives or other economic collectives based on identical individual interests, even beyond the framework of the family and relatives. In these, the entire membership of the collective is able to practice its owner's rights directly and to oversee the enterprise's operation, i.e., to take a direct part in the enterprise's internal management. No doubt, this cannot be done in the case of large cooperatives which can be managed only through delegates; the same is true in the case of large state enterprises as well. In the former, (especially in the large agricultural cooperatives), membership (owner) and operator (employer) functions could be combined in a positive way by either helping the units of large cooperatives become independent cooperatives or, maintaining the framework of the large cooperative, by developing internal units of self-accounting in which the individual work collective enjoy almost a total economic and autonomous independence ((18), pp 62-81). In such a system, the individual self-accounting units would be, similar to the local organizations of associated work, in total control ("quasi-owners") of the assets under their responsibility and would work with the associated work organizations and similar cooperatives through self-elected collectives and individual organs of self-government (cooperative).

Under such circumstances the cooperative could gradually change into an institution in which its own members would organize its activity and enterprise. This would be different from the traditional cooperative which maintains large common work organizations and in which the cooperative and the factory are combined.\* In addition, individual or family "quasi" ownership and enterprise can also be connected with the "worker function" both within the totally self-governing "self-accounting unit" of the cooperative or the enterprise and within the small cooperative, small enterprise and even within a larger cooperative-enterprise. This is supported by the experiences of individual/family subcontracting, of putting livestock on household plots, of breaking down self-accounting into individual tools and users, and of lending tools on a competitive basis to contracted individual or small-group enterprises in the agricultural cooperatives. (See the experiment of the Liberation Cooperative of Szentes in subcontracting stores, restaurants etc.)

The solutions sketched above can be applied equally to industrial, agricultural and trade enterprises that belong to the state and cooperative sector. In addition, Kopatsy's proposed (holding) system of operation by independent owners and that of worker/member autonomy do not exclude one another. This also means, on the one hand, that, even in the case of organizing the state enterprises under holdings, I find it necessary, contrary to Kopatsy, to establish an institutional system of enterprise autonomy and economic democracy, similar to those of the cooperatives. For I disagree with the view

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\*Such a concept also appears in Sandor Zsarnoczai's work.

that the separation of owner, manager and worker interests is the right way. This is a neo-liberal view which is disregarded even in the advanced capitalist economic system. An excellent example for this is the West-European system of factory workers-council and the system of joint decisionmaking by employers and employees on the basis of company constitution (15); these have been introduced even in the cooperative sphere (6). In this regard, despite working out the system of holdings, Kopatsy does not go beyond the present structure of the state enterprise in which the position of the employer and the employee is strictly separated, this being reflected in the work contract. In this connection I feel that Gyula Eorsi's (8), Tamas Sarkozy's (23) and Istvan Hegedus' (9) conception system is much more progressive: these want to change the present contracted employment to make it similar to that of cooperative membership, also changing the present "autonomous" labor law to collective labor law.

As in the case of state enterprises, the holding and economic democracy can be, I think, combined. I also see a possibility of such combination in the cooperative sphere as well. However, a pre-condition for this would have to be the development of a cooperative bank system, already proposed in cooperative literature; this would deal with the administration and circulation of cooperative securities and with the maintenance of a cooperative foundation proposed by Laszlo Kotz ((2), (16)). As the organization that manages state assets could also sell the "stocks" of an enterprise founded by the state to the cooperative or to the cooperative banks (which could, on this basis, change state enterprise departments, too, into cooperatives), a cooperative could also be changed into a state enterprise. This would eliminate once and for all the "compulsory nationalization" of cooperatives (as was done in the mid-1970's not only in the neighboring socialist countries but also in Hungary) which manifested itself mainly in the merger of individual unprofitable cooperative departments with state enterprises (cooperatives).

I mentioned it earlier that the possibility for all variations of the solution should be allowed by the new socialist economic constitution ((10), p 4) and the uniform enterprise statutes, similar to the old trade regulation. For at present we are in the experimental phase of the socialist economy's reform. For this reason, every non-exploitative economic solution could be interesting. This is the basis on which I think the varied enterprise typology (included in the proposals that Tamas Sarkozy compiled on the basis of his own concepts and that of others) is positive which could perhaps be made even richer. ((25), Part III, Chapter 4). There is another conceivable variation, namely, that the owner organizations (holdings), which administer state assets, could be put under direct government supervision as enterprises of special national economic significance. All of this would be related to the variedness of enterprise typology guaranteed by special legal measures; this variedness, for the sake of the actual operability of the holding system, should be connected with the consistent separation of the activity of the central bank and that of the credit bank. (1)

Returning again to the separation of the tasks of the state and those of the management, we must also deal with legal questions to which we must give answers, not Kopatsy. The legal supervision of state enterprises, separated

from owner supervision, should be similar to the legal supervision of economic associations. Supervision of state enterprises, cooperatives and economic associations should be taken away from the jurisdiction of the branch management organization and should be put under the jurisdiction of the county council's department of general legal supervision. This department should have the right indeed to employ sanctions against any enterprise, including fines, not only within legal but also within trade supervision. The responsibilities of the branch supervisory organs would include, on the one hand, the coordination of the institutional system of service and public administration (institutes of quality control, institutes of livestock health, plant protecting, agrochemical etc. stations) under their jurisdiction and, on the other hand, the official inspection of enterprises. However, they would not be allowed to make resolutions against an inspected enterprise that would involve any legal disadvantage, i.e., a sanction; they would only have the right to report, and a sanctioning resolution could be made only by the regional organ which exercises legal inspection. I think this answers the other problem as well, the objective of which being the separation of branch/trade service and public administration from branch supervisory activity.

In closing, I totally agree with Kopatsy in what the factors are that result in the bureaucracy and inflexibility of the Hungarian economy. Agricultural cooperatives are still plagued by the de facto monopoly of the purchasing enterprises, by the legally guaranteed compulsory contracts involving every significant product (e.g., planting seed, breeding materials) and by direct exporting rights that are denied to producers (21). Without this independent export right of the producer, the foreign trade enterprises automatically acquire a monopoly, and this, as all kinds of monopoly, has a distorting effect. Official pricing, which does not reckon with (or not to the necessary extent) the market situation, and the inclusion in the prices of extra overhead costs of monopolistic enterprises also have a distorting effect on prices (pp 97ff). Kopatsy is also right in that the present system of profit taxation is helping the inefficient enterprise, for "...it takes away benefits where it should extend them, and gives benefits where they should be taken away." He is right in confronting this with "production factors, i.e., taxes on net production, which equally burden both the good and the bad" (pp 31ff). Such a tax system could serve a healthy enterprise selection. This would also speak for the introduction of a linear tax system which would benefit both the treasury and the enterprise and thus would function as an incentive (20). Within the system of economic regulation, the progressive wage taxes on increased average wages as well as the centrally determined wage scale, also affecting the cooperative membership, have the greatest braking effect on the development of an internal self-accounting system that approaches the functions of the ownership of work. I totally agree with the introduction of a free labor market as well which Kopatsy demands. But I would be even less afraid of the danger of inflation resulting from a free wage outflow than he is. I also agree with Kopatsy's discussion of the manager market. It is unnecessary to implement political criteria through administrative means against executives, for these will be implemented by themselves. I add to Kopatsy's related and completely correct

statements that, in the case of the cooperatives, legally guaranteed rights of autonomy are violated by the right of the president of the county council (guaranteed by decrees of branch ministries) to veto the appointment of a president elected by the membership ((5), pp 576-579).

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9414

CSO: 2500/475



## CONDITIONS FOR CULTIVATION OF WINTER RAPE DISCUSSED

Warsaw ZIELONY SZTANDAR in Polish 24 Jun 84 p 7

[Article by Lucjan Cimek: "The Agricultural Technology of Winter Rape"]

[Text] Winter rape is the only oleaginous plant cultivated on a large scale in Poland. The soil, forecrop, time of sowing and fertilization are the most important factors in its hibernation and harvest.

The soil should be well-cultivated and in good condition with no weed growth and have controlled water ratios. The requirements are met by soil classes I to IV. An abundance of soil nutrients is not as important because intensive and regular use of mineral fertilizers can make up for shortages of specific ingredients.

The best growing areas for rape are fields in which leguminous crops or leguminous crops mixed with green fodder oats have been grown. Good forecrops are spring potatoes and seed peas but also red clover and alfalfa plowed under after the first mowing. The latter are good forecrops for rape but if they are used as such, at least one mowing will be lost. If the forecrops were red clover or alfalfa, they are best used as grain ear crops. Although the results are not as good, it is also allowable to plant rape after grain. The best such grain forecrop is winter barley because it is cleared earlier from the field.

Rape can also be cultivated after rye or summer barley.

Rape is a phytosanitary plant which disinfects the soil after frequent grain planting and is thus a very good forecrop for winter wheat.

When cultivating fields with rape after early-harvest forecrops, we begin with shallow skimming and harrowing. Seed plowing at a depth of as much as 25 cm is done 3-5 weeks before sowing. At this time, the soil undergoes a natural settling. This allows shallow (1.5 cm) seeding which makes possible more regular germination of the rape. The clover turf can be cut before skimming with a disk harrow. Following harvest of mixtures of fodder legumes and peas, if the field is not overgrown with weeds and the soil has good structure, seed plowing can be done immediately, best using a plow with a skim plow.

We begin the tilling of fields where grain has been cultivated and weed-infested fields by skimming and then immediate harrowing. Weed infestations are destroyed as they appear by harrowing. Therefore, it is necessary to do the seed plowing just a few days before sowing. After plowing, it is good to use a subsurface packer roller. This presses the arable layer to the layer beneath and to a certain degree substitutes the natural settling of the soil. Once these measures have been taken, we harrow and then the field is ready for sowing. If, however, the soil is too friable, we can use a stringed roller to prevent the rape seeds from being too deeply planted.

Rape is one of the plants that is sensitive to cow dung fertilizer. It is recommended that dung be used in doses of about 30 tons/hectare after a grain and especially a rye forecrop. Of course, if the farm has a surplus of this type of fertilizer, it can still be used after better forecrops.

However, following forecrops that are harvested late, it is better to not use dung so that the rape can be sown at the optimal date (i.e. up to 25 August), because late sowing will hurt plant hibernation and reduce the harvest more than the omission of cow dung fertilizer. If, however, we do choose to use dung, then to apply it with the necessary speed, we put it on the stubble and then cover it by skimming or spread it over the harrowed skimming and then plow it under.

Rape requires nearly neutral soil, i.e., with a pH of over 6.0. For that reason, acidic and slightly-acidic soils should be treated with lime. If, however, the lime comes into direct contact with the rape, we spread it over the stubble. If we are also using dung, it is necessary to apply the lime to the stubble and then cover the dung during the seed plowing. This is to prevent the lime from coming into contact with the dung.

We must remember that a high dose of dung will not completely satisfy winter rape's nutritional needs. Dung must be supplemented with mineral fertilizers. The dosages of mineral fertilizers depend upon the richness of the soil, the forecrop and the amount of time elapsed since the last application of dung. If we are not using dung, then before sowing we apply 80-120 kg of  $P_2O_5$  (it is better to use it in the form of individual superphosphates because they contain sulfur necessary to the rape's growth) per hectare and 100-160 kg/hectare of  $K_2O$ . Phosphorus-potassium fertilizer is applied in its entirety before sowing, during seed plowing or harrowing.

Rape is fertilized twice with nitrogen. A small amount is applied before sowing and the bulk of it, 140-160 kg/hectare, is given in the spring. Nitrogen is not applied before sowing when rape is cultivated on fertile soils after papilionaceous plants or whenever dung is used. On the other hand, following worse forecrops and in weaker soils, we use 30-40 kg/hectare of nitrogen. Higher doses are not used before sowing since nitrogen overfertilization can lead to plant freezing. We cannot, however, altogether dispense with using nitrogen because a lack of it may cause weak hibernation and lower rape yields.

Ammonium nitrate for spring fertilization of the rape is best applied in two doses. The first dose is given when the vegetation first appears and the second

at the beginning of the budding stage, i.e., 10-14 days later.

The strongest factor in rape yields is the sowing time. The plants should have enough time before winter to grow well-developed rosettes of 8-10 leaves. However, the sowing cannot be done too early since overgrown plants hibernate poorly. The sowing cannot be done too late either because underdeveloped rape will not survive the winter. The best sowing time in the central eastern region of Poland is between 15 and 20 August or as late as the end of August.

Rape is sown in rows 30-40 (mostly 33) cm apart at a depth of 1-2 cm with 6-8 kg of seed per hectare. If the seeds are sown too thickly, there is excessive extension of the root neck, which is most susceptible to winter frost.

It is also necessary to remember to dress the rape seeds before sowing them. Fifty grams of GTS seed dressing per kilogram of seeds is best for this purpose. The dressing prevents seed rot and cruciferous plant mould and inhibits flea beetles and gall weevils.

Treflan EC-2 and Mensoranil 50 WP are most widely used in Poland to prevent weeds from growing in winter rape fields. The herbicide Lasso can also be used because it fights very troublesome weeds such as fennel, dead-nettle, birds-eye and annual meadow-grass.

12261

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## SHORTCOMINGS IN TECHNICAL EXPORT ACTIVITY CITED

Bucharest REVISTA ECONOMICA in Romanian No 15, 13 Apr 84 pp 9-11

[Article by Adrian Olariu: "Complex Exports and Growth in Efficiency"\*)]

[Text] The amplitude of the machine-building industry's development registered in the period after the Ninth RCP Congress is well-known. Without using numbers to illustrate this major phenomenon, it is obvious that it was a stage of quantitative accumulations, an objectively necessary stage that allowed the developing Romanian economy to create for itself a strong technical-material base, that of an industrialized country, for bringing this economy into international trade at a competitive level suited to the requirements of the great majority of the partners.

This was done against the background of the world capitalist system's general crisis, of the world economic crisis, manifested in its various forms, among which the world energy crisis put its imprint on all the national economies, widening the gulf between the rich countries and the poor ones.

Despite the difficulties encountered, the Romanian machine-building industry continued to develop. Within it, the building of machines and equipment meant for the oil industry experienced relatively high development, considering the world economic situation: against the background of the energy crisis, the activity of prospecting, drilling and extraction of hydrocarbons increased, which led to growth in the demand in relation to the supply of petroleum equipment, a matter that entailed the development of the petroleum-equipment industry. Undoubtedly, this favorable situation in the '70's influenced positively the development of the respective production capacities in Romania, within the framework of the general development of the competition. Important commercial operations, both as to the economic result and from the viewpoint of the country's economic prestige throughout the world, were achieved in this period.

Since the start of the '80's, the economic situation has flip-flopped radically: the supply of petroleum equipment is much greater than the demand, which has entailed implicitly an unprecedented increase in the competition in this field. Until about the middle of the '70's, the petroleum-equipment market was controlled by a few big North-American firms, but now there are in the world

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\* As part of the discussion, also see: REVISTA ECONOMICA, No 37, 1983, and Nos 8 and 10, 1984.

many strong firms that have already created a name for themselves on all continents. Moreover, a national industry that competes successfully with the well-known North-American firms has arisen in the countries that are big consumers of petroleum equipment. This is the case of the petroleum-equipment industry in Brazil, Argentina, Mexico, India and so on, which have developed themselves on a license basis or on their own.

On the other hand, the rise in the price of petroleum has led to the reconsideration of the energy policy in all the petroleum-consuming countries, turning from the era of waste to energy programs of strict economization. This aspect has entailed another phenomenon, somewhat contradictory for the energy-crisis stage--namely, a drop in drilling activity and a reduction in crude-oil extraction.

In the area of petroleum equipment, under the conditions of the existence of an already large number of producers in the world, the decline in drilling and extraction activity has entailed two phenomena:

- a) The appearance of a stock of equipment in storage, taken out of operation, therefore having a certain amount of wear, offered for sale at very favorable prices or offered for rental (leasing);
- b) The appearance of a stock of new equipment, which has not found a buyer yet, offered at low prices or for rental.

Under these conditions, the Romanian petroleum-equipment industry has already encountered, for a few years, tough competition in placing its production on the international market, especially the capitalist market.

Although, according to the forecasts of some experts in the field, a revival of the total sales is expected, the selling of petroleum equipment on the capitalist market to a greater extent depends on the way in which action will be taken in the near future both in the area of producing it and in the area of promoting it on the foreign market. It is no longer possible to act in the usual manner of waiting for the buyer, but it is necessary to adopt an attitude of initiative, of quickness and--why not?--of aggressiveness, in the good sense of the word.

It is necessary to act on many planes at the same time, both for keeping the markets on which Romanian petroleum equipment has been introduced and for introducing it on other markets, through many directions of action.

#### Modern Technologies, Cybernation, International Norms

First, of course, it is necessary to act regarding the equipment itself. Under the conditions of the competition existing in this field, some firms have created highly productive equipment, installations and tools of a very high technical level, with automation and computerization being introduced in the place of the heavy and sometimes risky work of the oil-industry workers. These creations, offered at a relatively slightly higher price than that of the "classic" equipment that they replace, are preferred by their users, who achieve a

reduction in the cost price per meter drilled through the rise in the drilling productivity.

In order to maintain our competitiveness in the field of this equipment, it is therefore necessary to create and offer for exportation products with a high degree of automation and computerized control, at a world level or even at a higher level.

In this regard, the secretary general of the party, Comrade Nicolae Ceausescu, stressed at the recent plenum of the RCP Central Committee that "all the products of Romanian industry must be achieved at the highest level, in conformity with the requirements of the scientific and technical revolution and with the Program for Raising the Technical and Qualitative Level of Products."

In the case of the equipment for which the introduction of automation, electronics and computerization is not possible due to its specific character, there have appeared on the world market lighter, easier-to-handle constructions, without their qualities and reliability being reduced, but, on the contrary, under the conditions of increasing them and under the conditions of holding or even cutting the price.

Our petroleum-equipment industry has begun to act in this regard, but the assimilation of new equipment into production, already conceived for the most part by the specialized design institute--the Ploiesti IPCUP [Design and Research Institute for Petroleum Equipment]--belonging to the Ploiesti Industrial Central for Petroleum Equipment, is going slowly due to the regulations in force regarding the approval of it for exportation and due to reservations still existing in the producers when it is a question of introducing the new in the place of a piece of equipment that has proved to be good but is obsolete. As regards the subjective, conservative aspect of retaining the old product, experience and, in particular, competition ultimately cause the producer to deliberately give up any reservations, but as regards the aspect of approval, it is necessary to find ways to improve the methodology.

At present, the exportation of a product can be done only if it has passed the examination for approval--that is, if it has been tested in operation at one of the wells or petroleum sites in the country. However, in order to be tested under operating conditions, it is necessary to fund such a work point, at which it is possible to do exactly the work for which the new product was created; until this point is found and until the period meant for the operating test passes, very valuable time is lost, unfortunately still too much time, which becomes an eliminatory condition under the conditions in which there are firms on the capitalist market that offer their products with delivery in periods of a few weeks or even from stock.

In this regard, we believe that it is necessary to create a framework for acting quickly, for achieving and approving the new equipment in a short time. This could be done in sectors specially created for this purpose in each enterprise (a kind of pilot sector) and by immediately performing operating tests on stands simulating the real operating conditions.

The following question frequently comes from the producers: If they create new products, for achieving which considerable funds are spent—which is absolutely true—is there really a guarantee of placing them on foreign markets—in other words, is the spending of these sums justified? The answer is affirmative, of course, in the case of petroleum equipment. Life shows that the "classic" products, without being eliminated, have fewer and fewer advocates under the conditions in which there are very many producers. In order to be able to sell more, it is necessary to separate the Romanian petroleum-equipment industry more and more from the group of "standard" producers and to move it into the group of producers at a high world level, where the competition, although it exists, is less.

It is also necessary to add to the above a specification: Invariably, our petroleum-equipment producers have the tendency to ask higher prices for new products, qualitatively better than the old ones, even if this is not always justified by the costs, without considering the fact that the similar products of the competition are sometimes even cheaper than the "classic" products. Thus, although the product has become competitive from a technical viewpoint, it is not competitive commercially, as a commodity. On the basis of the information received from the foreign trade enterprise, the producer will have to know how to choose the most suitable technology for achieving the product under conditions of efficiency, in order to be able to also offer it under conditions of commercial competitiveness.

The raising of the degree of utilization of metal, through improved processing technologies, constitutes a chief way to make such exports profitable. In specialized exportation, this major objective of the Program Regarding the Improvement of the Technical and Qualitative Level of Products takes the form of absolutely necessary measures for ensuring sale on foreign markets. Thus, parts of cast steel are still used to a great extent to make petroleum tools and equipment. We are referring particularly to the drilling-tool group, to pit-mouth equipment (preventers, casing heads, Christmas trees, and almost all the fittings on manifolds and the detached ones), to mud-pump bodies—and the list could go on. Without dwelling on the disadvantages that the technology based on cast semiproducts, theoretically characterized by a higher percentage of rejects and thus more metal consumed, has in general and also without discussing the quality of the equipment made by casting, since functionally it meets the operating requirements, we must nonetheless stress the advantages that a piece of equipment made by forging has both for the producer and for the user. In particular, this equipment becomes lighter and thus has a lower specific consumption, it can be handled easily, it does not require special means of transportation and hoisting and (what has become more important now, when the accessible areas have been almost totally explored) it can be transported easily to harder-to-reach areas. Besides these things, the customer has greater reliability in a forged product: a product made by casting can have hidden flaws in the material, which may appear during operation, but which are almost excluded from a forged product.

These considerations, found moreover in the express specifications in the auction booklets (that only forged constructions will be preferred or are accepted) must bring about a shift to these constructions, even if it is necessary to invest funds for creating suitable forging sections.

Lastly, a final aspect connected with the quality of the products offered for exportation refers to a characteristic of this field. It is well known that in the field of petroleum equipment the United States of America is the one that, through the volume and quality of the equipment produced, determines the general reference level of the market.

This line is configured technically by the American Petroleum Institute (API), which, over its decades of existence, on the basis of the experience accumulated in this field, has drawn up a series of generally recognized standards. Moreover, regardless of country, the manufacture of petroleum equipment and tools in conformity with the norms provided by the API standards represents an assurance of quality, and in the case in which there is obtained from the American Petroleum Institute a certificate, through which conformity is attested and, implicitly, it is possible to apply the specific seal of the institute as a sign of quality, the product is guaranteed qualitatively to any potential buyer.

At present, Romanian products are made on the basis of the state standards in force, which are drawn up in conformity with the API standards for the most part. Nevertheless, the mere mention of the fact that they are made in strict conformity with the API standards no longer meets the requirements of foreign customers, who demand, in order for the merchandise to be accepted technically, that there be the American Petroleum Institute's authorization to apply the API seal. The application of this seal on a product has thus become a requirement of the foreign market, and in order to be able to stay on the capitalist markets, our industry ought to adapt itself to this requirement. The respective authorization has already been obtained for the Bucharest "Vulcan" pumping units and for the petroleum gauges of the Bucharest Precision Machinery Enterprise, but it is necessary to speed up the obtaining of the API certificate also for the rest of the products, even if this will mean an extra effort by the producers.

#### Network, Service, Promotion

Second, it is necessary to act regarding the activity of marketing the products abroad, going from the way of presenting them, to pursuing the providing of the proper functioning of exported products. More precisely, it is a question of raising the respective activity to a new quality in the following directions: the marketing network; service; and publicity.

As regards publicity, due to the specific character of the merchandise, this is done especially in forms addressed to the specialists in the field, like magazines and other specialized publications, fairs and expositions, symposiums, advertising films and so on.

Something has been done in this direction, in the sense that the Bucharest "Industrialexportimport" ICE /Foreign Trade Enterprise/, the one that is concerned with furnishing Romanian petroleum equipment for exportation, is present in very many specialized publications, among which one notes the inclusion of substantial presentations in the "Composite Catalog of Oil Field Equipment and Services," published every 2 years by the Gulf Publishing Company in the United



States, a publication that contains the biggest manufacturers and exporters of petroleum equipment in the whole world. The manufacturing and export program of the Romanian enterprises supplying petroleum equipment is presented in a condensed form in this catalog, with the specification of the new products appearing during the 2 years between editions of the prestigious publication. Since all buyers of petroleum equipment in the world have at least one such catalog in their possession, we can say that the "Industrialexportimport" ICE is present in the data bank of each of them. This is very good, but it is not enough. The custom is for the suppliers of petroleum equipment, through a constant action of "reminding," to regain the attention of the buyers through other specialized magazines and irregular or periodical publications like WORLD OIL, OIL AND GAS JOURNAL, DRILLING (the Wellsite Publication), DRILLING CONTRACTOR, INTERNATIONAL TRADEQUIP (Energy Equipment and Services Classified) and so on, from whose pages, unfortunately, Romanian equipment is missing.

It is very true that the publication of announcements or advertisements in the respective publications represents an extra financial effort, but it must be considered that, in fact, this effort represents an investment and not a mere expense, an investment that should entail a positive economic result.

The participation of the Romanian petroleum-equipment industry in international fairs and expositions, within the national pavilions or its own stands, also belongs to the publicity field. Annually, the "Industrialexportimport" Foreign Trade Enterprise participates in countless such exposition events with exhibits, models, slides, films, prospectuses and catalogs. The results obtained thus far are satisfactory, beyond a doubt, and further participation is necessary. Improvements can also be made in this direction, especially in selecting the exhibits in the idea of presenting only the Romanian products still unknown on the market or in the area in question, with which it would be possible to give demonstrations within the stand or outside the exhibition.

In such a context, although demonstrations of petroleum equipment are harder, they have a very important role in getting the potential client to choose one producer or another.

However, the marketing network, on whose activity the materialization of the operation depends, has the most important role. A well-organized, active network, going from the foreign trade enterprise, as a coordinating unit, to its representatives and agents abroad, can provide stability and permanence on the world market. Especially now, when the competition is so active, a wait-and-see strategy of distribution for an exporter of petroleum equipment is tantamount to withdrawing from the market. We believe that it is no longer necessary to point out that the one who is present and insistent is always victorious.

However, we can say that we still have much to do in this direction. "Industrialexportimport" has a very limited foreign network, located mainly in socialist countries. It is a network that must be reorganized in the light of the tasks that face the Romanian exporters of petroleum equipment, by creating proper representations in areas and countries consuming such equipment, like North and Central America (the United States, Canada, Mexico), South America

(Argentina, Brazil, Peru, Colombia, Ecuador, Venezuela and Boliva), North and West Africa (Nigeria, Algeria, Libya, Egypt), the Near and Middle East (Syria, Jordan, Iraq, Iran, Kuwait, the United Arab Emirates), South Asia (India, Pakistan, Bangladesh) and Southeast Asia (Burma, Malaysia, Indonesia and especially Singapore).

This network will have to have an activity of continually investigating, of taking the pulse of the world market and of quickly informing the foreign trade enterprise, in order for the necessary steps to be taken to gain every possibility of placing equipment a moment ahead of the competition. For this purpose, the people sent to represent the interests of the enterprise and of the country will have to exhibit, besides thorough specialized training, initiative, mobility and special ability in the work of forming and, in particular, keeping a circle of clients. It is a question of work for which enthusiasm, talent, aptitude and much sense of responsibility and patriotic self-sacrifice are required.

There is no longer any doubt that the key to the success of an exporter of machines and equipment lies in such organization for the most part. Very many firms of repute that keep themselves in top spots in the ranking of equipment exporters due to the international network, despite the general crisis situation, are known in the world.

Such a firm is the Marubeni Corporation in Japan, which has a network of over 130 representations all over the world, even having some representations in several cities in a number of big countries; however, it is known that Japan has registered for years on end positive balances of trade with all partners in the Common Market, with the United States, with Canada and so on, a thing also achieved through the insistent, aggressive operating system of the international marketing network of its corporations, of which Marubeni is also one.

Last but not least, the way in which an exporter's equipment operates for the users is of great importance for keeping any exporter on a market. Operation with as few interruptions as possible and especially with short stoppages can often promote a piece of equipment, even of a lower technical level than a piece of equipment that is better made technically but, due to long stoppages, is detrimental to its user. We are referring by this particularly to the activity known by the term "service." In the field of petroleum equipment there is a service network, which has both the role of pursuing the proper functioning of the equipment that it services, but which, through the seriousness, the timeliness of the overhauls, and its integrity, also has a very important role in keeping a firm on a market, in expanding its activity on it and even in influencing the customers in adjacent countries to choose a piece of equipment with service provided. To put it in other words, this is advertising done through the sold product for the products still on the manufacturing line, through a direct demonstration.

One condition so that a service network may operate without reproach is, besides mobility, timeliness and professional training for the technicians, the existence of a stock of spare parts on hand, in order to be used promptly for any problem that can appear, especially as the cost of a day of drilling

exceeds the figure of \$10,000. Both the service network and the warehouses on consignment of spare parts are important sources of income in areas where there is a minimum stock of exported equipment, but especially in areas where this stock is big. It can be organized according to countries or geographical areas, especially as regards the creation of warehouses on consignment of spare parts, which would cover a wider area. From the respective warehouses it will be possible to make various deliveries, for repairs or current maintenance work, done by mobile service groups, and deliveries of disparate parts on the basis of orders of the various clients. In an even more developed form, the warehouses in question could also represent a jumping-off point in eventual cooperation with a local firm, in the production of subassemblies and petroleum equipment. We emphasize that well-organized service, which ensures the continual functioning of equipment, brings, besides the financial aspect, many benefits in the sense of achieving indirect advertising both for the respective product and for the seriousness and solidity of the enterprises that it represents, in particular, and achieves an act of propaganda in favor of the prestige of the country, in general.

The analysis of the sort made above--to which the Program for Raising the Technical and Qualitative Level of Products spurs us--of a comparison with firms of repute in the world of petroleum equipment, underscores the scope of the objectives that still face us this year.

Upon us there devolves the task of finding, on the basis of the experience accumulated during the years of existence of "Industrialexportimport" and on the basis of the things known from the practice of other exporters of petroleum equipment, the most suitable and efficient forms of organization and operation, compatible with the Romanian mode of thought and the country's legislation, in order to promote and expand Romanian exports of petroleum equipment to the level of the new quality of the activity in foreign trade, in the spirit of the instructions and requirements of the RCP secretary general, Comrade Nicolae Ceausescu.

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## AUTONOMY, INTERDEPENDENCE OF MONETARY SYSTEM EXAMINED

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[Article by Constantin Ionete: "The Autonomy and the Interdependences of the Monetary System"]

[Text] The operational requirements for managing the economic processes put on the list of research priorities the monetary phenomena whose content has registered true changes in the modern economy. The legitimacy of bringing them back into discussion is also underscored by the scope of the concerns for continually improving the economic mechanism in our country, within which the monetary system occupies a relevant position. Undoubtedly, many of this system's problems, pointed out in the course of time, can be clarified according to the delimitation of the elements on which both its autonomy and its interdependences are based.

#### The Structure of the System

The operation of the monetary system in our national economy is based on the existence of a proper structure, composed of the money supply. This is a primary economic category that serves as a starting point in the analysis of monetary phenomena, without requiring a definition. The money supply possesses all the traits that characterize in general the structures in nature and society.

In the forefront there is the manifestation of its economic power within the monetary system only in its capacity of an aggregate of component elements that it integrates into a whole that exceeds their sum. Indeed, the specific action of the money supply on the process of expanded reproduction is not the additive result of the effects of forming and utilizing the monetary reserves in accounts or in cash, of the different monetary funds, of the reserves or of other structural elements. This action is exercised through the direct relationships between the total monetary supply and the basic correlations and proportions in the economy. As a result, the monetary system is defined from the outset, through the nature of its structure, as a macroeconomic mechanism. The money possessed by citizens, that in the safes and accounts of the enterprises and institutions and even that in those of the banks do not constitute autonomous economic structures and do not reflect "in vitro" the economic potential of the money supply. These components participate in its manifestation, but only within the whole, at the level of the economic units, generating in fact microeconomic phenomena.

Like any structure, the money supply is formed and is conserved under the impact of lawlike requirements. Money's entry into, its stay in and its exit from the economic processes are due not to discretionary acts of the banks but to these requirements, proper to the monetary system. The observance of the laws that provide for the conservation of the structure is reflected in the money supply's state of equilibrium in the course of the changes through which it goes. This has the dual aspect of an internal equilibrium of the money supply and a result of its relationships with the economic medium. The invariance of the money supply in the course of time constitutes the quantitative index of internal equilibrium. It is expressed by the maintenance of the par value of the money in the real economic processes at a constant level. The behavior of the value of the monetary unit thus becomes a means of microeconomic reflection of the degree of conservation of the internal equilibrium of this macroeconomic structure.

But the equilibrium between the money supply and the economic medium, which is based on the convergence of the interdependences, is decisive for the operation of the monetary system. The identification of the medium with the process of exchange, when the relationship between commodities and the money in circulation was simple and exclusively quantitative, has been outmoded for a long time. In developed commodity production, the economic medium, as a correlative factor of the money supply, also includes the processes prior to exchange--that is, production and development--enclosing the equilibrium in all the dimensions of time, not just in the present, with a special accent on the prospects of the economy.

In this way, the interdependences of the money supply pass from element-by-element correspondences to direct and indirect quantitative and qualitative relationships with dynamic economic aggregates, involving the management of monetary phenomena through decisions and the seeking of the economic optimum for providing equilibrium. Only in relation to the medium is the structure of the monetary system defined as an autonomous object that is conserved under the conditions of its internal and external equilibrium. In the course of time, economic and monetary disequilibriums have manifested themselves in the deterioration of the money supply, expressed in the reduction of the value of the monetary unit to almost zero. The relationship between the law of equilibrium and the operation of the economic systems with autonomous structures has been so obvious that it has served as a starting point for extending structural analysis to many fields of the natural sciences and even to other sectors, as is the case of linguistics. In addition, economic structures have been formalized for a very long time. The index of the purchasing power of money constitutes one of the first formalizations of monetary equilibrium, as an expression of the conservation of the money supply.

For millenniums on end, the formation and conservation of the money supply have been the result of the action of the laws of the development of commodity production. But in this process it has proved to be an active structure, with a growing capacity for self-construction and, at the same time, for self-regulation for maintaining its equilibrium. Indeed, the remote history of the evolution of the forms of money up to gold as a general equivalent, of the plurimetallic monetary standards, of hoarding, and of the formation of monetary

reserves and savings constitutes only a few of the actions indicative of this behavior of the money supply. The modern economy is the seat of spectacular responses of the monetary system to the requirements for changing the medium to maintain monetary equilibrium. The generalization of credit money, the demonetization of gold and the adjustment of the money supply through devaluations and revaluations and, in recent years, through the fluctuation in the rates of exchange belong to the first forms of international currency without gold and serve as examples. They are not the exclusive result of the decisions of the monetary authorities but are manifestations of the capacity of monetary systems for self-construction and self-regulation.

The fact that the reactions of the money supply to the changes in the economic medium generate changes in it is very obvious. They unfold with time and impart a dynamic character, an evolution of the money supply's size, of its component elements and even of the functions and objectives of the monetary system on the whole. The changes also correspond to the requirements for overcoming the growing degree of difficulty of monetary equilibrium. The synchronic changes—that is, the quantitative and qualitative changes in the money supply that accompany expanded reproduction in a given calendar period or for the normal duration of a cycle—are of interest regarding the operational economic processes subject to management in the planned economy in our country. Its start is triggered by the entry of the means of production and the work force into the process of utilization—that is, into production—and it ends with the absorption of the output into consumption. The money supply increases through emission along with the providing of credit for production and is reduced by the reimbursement of the credit on selling the commodities. In the case of growth in production, which is the rule in our economy, the change in the money supply is more complex. Although development is based on savings accumulated for investments, already included in the money supply, its volume nevertheless increases due to regular payments prior to putting the facilities into operation, with the whole or partial surplus being absorbed after this event.

The variations in the money supply contingent on production and its development determine certain characteristics of the change in the structure of which the knowing can have a previsionsal role. The regularity of the money supply's variations in volume in accordance with the phases of the cycle of expanded reproduction and especially with the utilization of the entries into production is relevant in this regard. The manifestation of a new dimension of monetary equilibrium—namely, the possibility of it according to the efficiency in utilizing the entries into production—is also just as important. Otherwise the increase in the money supply remains in circulation even after the end of the cycle and leads to disequilibrium.

From this comes the dependence of the changes in the money supply on the decisions regarding the development of the economy, with the attainment of equilibrium through emission being connected with long-term planning. The state of equilibrium is not determined by isolated sequential economic processes, such as sales and purchases of commodities, but is turned into a continuous action that can be called equilibration of the money supply. Of course, the regular variations in the money supply are primarily an effect of the rate of economic growth. In its entirety, the money supply, besides increasing through

emission, presents itself as a form of memory of the economy for a long period, summing up the accumulated results of past economic utilization.

The projective power of this economic force is based not only on the optimization of future development but also on the results obtained in this field in the course of time, a fact that brings out more strikingly the diachronic character of the money supply, even when, in the operational activity, its current aspects are pursued for the most part.

However, the changes in the component elements of the money supply are very obvious. In the few thousand years of existence, this structure, initially homogeneous, which is identified with the sum of the receipts from the sales of commodities in a more or less delimited economic space, has entered a process of diversification and has arrived at a multitude of components, expressed now by the liability entries on the balance sheets of the central banks. This process has unfolded on the basis of proper laws of composition that have not been studied yet.

Due to the fact that the new components have appeared, as a rule, not through the elimination of the old ones but through the changing of the percentage and functional importance, they can be reconstituted by accenting the necessity of the historical approach to modern monetary systems. The development of the commercial banks opens up a field of affirmation for bank deposits and monetary savings, and the domination of the central banks turns monetary emission into the most active component of the economic power of the money supply.

#### Directions of the Transformation of the System

The diachronic compositional character of this structure is not limited to it but concerns the monetary system on the whole. In order to maintain the state of equilibrium, it acts not only by changing its structure but also by forming and developing proper functions.

Monetary circulation is one of the innate functions of this system. Being implied by the inner nature of the money supply, it is sometimes identified with it or considered an all-inclusive trait of its. Indeed, the money supply, especially through its active part, has the perfect form of the liquid assets of the economy, which appear as continuous economic flows. But this fluid state of the material values has demonstrated its capacity to act through its intensity and acceleration on the volume of the money supply and thereby on its equilibrium with the economic medium. Hence the autonomous development of the dynamics of the economic liquid assets, as a specific function of the banking system involved in the regulation and self-regulation of monetary equilibrium.

Its functionality has been provided through proper means that have become diversified in the course of time. The forms and instruments for speeding up payments and for mobilizing monetary reserves and reintroducing them into the flow are only a few of them.

The second function of the monetary system--monetary emission--has asserted itself and has been generalized much more lately--namely, in the latest period of

the modern economy. It is also connected with the evolution of the banking system, since it is established fully only under the conditions of the operation of the central banks, as forms of the monetary authorities instituted by the state power. Up to the consolidation of emission, the money supply as a necessary volume of the economic liquid assets was the result of the production of monetary metals, identical from this viewpoint with the production of commodities.

The function of emission marks the establishment of direct relationships, without the mediation of gold, between money as a credit relationship and the process of utilizing the means of production. Credit money anticipates the transformation of the entries into production into liquid assets and provides for the continuation of the economic processes without earlier accumulations concretized in gold or other precious metals. In this way, the capacity to utilize the means of production and the work force increases considerably.

The reality and the efficiency of the utilization of the entries into production constitute the guarantee of these titles of specific credit that compose emission, whose economic power ceases on the selling of the output, through the reimbursement of the credit for production. Due to the presence of the credit relationship in the occurrence of monetary emission, it has been and still is considered a function of the credit system. In reality, it is a function characteristic of modern monetary systems, which provides for the adaptation of the money supply to the demands for liquid assets during and on the basis of the utilization of the entries, in an economical manner with value coverage and without earlier monetary accumulations. As a result, emission becomes the highest expression of the autonomy of monetary systems, which operate without being tied to commodity money.

At the same time, their direct involvement in the economic processes and, simultaneously, the growth of the interdependence with the operation of the economic system on the whole occur.

In addition to the formation and diversification of the functions, the optimization of the adaptation of monetary systems to changes in the economic medium has also been done in other ways. The typical changes in the system on the whole caused by its reactions for providing monetary equilibrium are relevant from this viewpoint. According to the nature of the methods of equilibration, these changes can be put in the category of those that are based on self-regulation and in the category of those that result from combining self-regulation with regulation through decisions. Both their succession with time and the ratio between regulation and self-regulation are not well defined but are variable according to the degree of complexity of the structure and organization of the economic medium. These types of changes lead to the grouping of monetary systems into natural systems, dominated by self-regulation, and institutional systems, within which decisionmaking also appears and is developed.

The natural monetary systems, whose duration has extended over a few thousand years, operate without norms and regulations, through compositional and volume changes in the money supply, which are based on the economic power of commodity money and especially of gold.



The institutional monetary systems also came into being in the remote past. Their beginnings were marked by the state power's norms regarding the coining of money, which can be considered the first decisions in this field. Their conservation occurs with the formation of specialized institutions that have as an object the fulfillment of the functions of the monetary system. The maturation of the institutional monetary systems is achieved with the generalization of the monetary authorities. Through their decisions, they employ the size and evolution of the money supply as an autonomous economic force, in the process of developing the economy. Sometimes, the minimization of monetary institutionalization has led to the minimization of the mechanism of the monetary systems and, implicitly, to the violation of their autonomy.

The efficient form of the institutional monetary system has been constituted under the conditions of the planned economy. In this framework, the activity of equilibrating the money supply is integrated into the process of establishing in a substantiated way the proportions and correlations of economic development on the operational, medium and long terms.

#### The Money Supply and the Field of the Economic Forces

Both the network of interdependences and the autonomy of the structure of the monetary system can be followed in all their complexity by identifying the place that it occupies in the field of the economic forces. Of course, the category "economic force" is very broad. Ultimately, any real material value, in a physical form or one of a monetary liquid asset, and any potential value can be covered by the sphere of this notion. Nevertheless, these values become economic forces only insofar as they are active. This trait of theirs manifests itself in the process of utilizing the means of production. All the material values that participate in utilizing the inputs and turning them into the outputs needed for individual and productive consumption are true energy flows or economic forces. They are distinguished by their nature and potential and act in a delimited economic space, known by the term "domestic market," always in connection with the foreign market. As an area of manifestation of energies, the economic space becomes the field of the economic forces, similar from this viewpoint to an electric or electromagnetic field.

Each group of economic forces has a certain magnitude, expressed numerically by physical or value units, an area of application, composed of the entries into production, and a direction, in their case the utilization of the entries. The money supply is an important component of these forces.

Nevertheless, it has been less analyzed and even observed, due to the fact that in certain stages of the preparation and utilization of the entries it is partly identified with other economic forces.

The matter of preparing and starting to utilize the entries requires, besides means of production and manpower in physical terms, liquid value accumulations, which are formed and utilized as monetary funds, according to the economic laws of socialist commodity production. On the one hand, they are individual production and development funds of the economic units; the laws of their formation and utilization are the object of the finances of the enterprise. On the

other hand, in our economic system, large monetary funds with the same purpose are centralized in the state budget and are the object of public finances. For the holders of funds, these liquid assets with well-defined structures and functions in the utilization process also occur in the form of receipts and payments. In the interval between these operations, determined by the occurrence of production and investments, the monetary accumulations become structural elements of the money supply. In this capacity, they participate in providing monetary equilibrium in the economy as a whole. Moreover, the temporary reserves become funds for providing credit and thereby multipliers of the economic forces that help to widen the scale of utilization of the entries. At the same time, for the future, the use of the temporary reserves turns the equilibrium of the money supply into a dependent variable. In this process, the economic force manifests itself in the field of the other groups of forces, as an attribute of the money supply. But the greatest part of this economic force is directly involved in the process of utilizing the entries through monetary emission. This structural element accentuates the money supply's character of an independent variable in the field of the economic forces.

The correlations and interdependences between the individual production and development funds, the centralized ones, those for providing credit and the money supply, and their autonomy in the field of the economic forces, are defined in the process of resource utilization. Insofar as, in economic analysis, the accent has been put on interdependences, these economic forces have been regarded as a unit, as structural elements of an all-inclusive system--namely, the financial and credit system. Nevertheless, the active role of each group of forces manifests itself mainly through actions specific to the structure and functions of each.

This fact acquires a special significance in the case of the monetary system, which has not found its place in the title of the financial and credit system. Some superficial manifestations of financial and monetary phenomena facilitate the concealment of an apparently more diffuse energy. The monetary expression of the production and development funds has been considered a form of theirs, even when they become monetary reserves, although only as an element of the money supply do they reactivate their economic power. The identification of an autonomous structure, the money supply, with the monetary relationships into which any real economic value enters is obvious here. As regards emission, which transforms into liquid assets beforehand the means of production subject to utilization, the accent has been shifted from its economic power to that of credit.

There are also other aspects of the behavior of particularization of the money supply. The fact that, although it is directly involved in resource utilization, it does not participate in the distribution of its results--that is, the net income--is relevant in this regard. It is thereby similar to monetary gold, which covered the emission of convertible currency but was not utilized in the real economic processes. The action of this economic force apart from the distribution of the surplus product brings out its necessity for carrying out commodity production in any form of production relations and argues for the rejection of the thesis regarding the disappearance of money.

While it has not asserted its autonomy in the structure of the financial and credit system, the monetary system is always and rigorously included, distinctly, in a trinitarian economic aggregate that contains, besides it, the credit system and the banking system.

The analysis of the remote beginnings of this triangle of modern economic power has established the later appearance of the banks. In contrast, at least thus far, it has not been possible to specify the chronological priority of money or credit.

There is no doubt that the credit relationship, in its primitive form of trust between partners in exchanges made with more or less general equivalents, confirms the innate symbiotic relationships between these two categories. The coefficient of connection between them has increased its value in the modern economy, when monetary emission behaves as a structural element of the funds for providing credit, and in their turn, they, up to the making of the payments, are part of the structure of the money supply. At the same time, the requirements for equilibrium between the money supply and the economic medium are specific to the monetary system, and those between the credit needs of production and development and the capacity to mobilize the funds in the economy for this purpose define the credit system.

In the field of the economic forces, the relationships between the money supply, credit and banks are horizontal ones, not ones of hierarchical subordination or of structural inclusion. Their economic power unfolds coordinately within what systemic analysis calls the coalition of the functional structures. Due to the fact that the institutionalization of the monetary system and the credit system is achieved within the banks, they also provide conditions for combining their behavior in the search for monetary and credit equilibrium.

The identification of the characteristic aspects of the autonomy of the money supply in the field of the economic forces constitutes only a starting point. It is necessary to investigate it in all the basic and applied economic complexity.

The separation of the notion "monetary system" from some historical adherences is also part of the preliminaries of any analysis. It is easy to see that the term "system" is very productive in the area of monetary phenomena, as in other fields. The terms "monometallic" and "bimetallic monetary system" have had the widest circulation in the course of time. Clearly, any structure in nature and society fulfills the minimum conditions for a system and, consequently, the notion can also be used to connote forms of commodity money. In these cases, the term covers the regulations of the monetary authorities through which the use of gold or of gold and silver as monetary standards was generalized.

The monetary system in our national economy is a highly complex economic mechanism, with a structure and functions of its own, engaged in the process of expanded socialist reproduction.

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# NEED TO PROTECT HARVEST AGAINST FIRES STRESSED

Bucharest PAZA CONTRA INCENDIILOR in Romanian May 84 pp 2, 20

[Article by Matei Georgescu]

[Text] Putting into practice the valuable directives provided by the secretary general of our party, Comrade Nicolae Ceausescu, at the recent Plenary Session of the National Council of Agriculture, Food Industries, Forestry and Water Management, working people of this important sector of the national economy are improving themselves through diligence, determined to celebrate the 40th anniversary of the Revolution of Social, National, Antifascist and Anti-imperialist Liberation and the XIII Congress of the party with the very best results in their work.

Under the leadership of the party organizations, workers of SMA and IAS, cooperative farmers, specialists in research and production, all of whom are engaged in the implementation of the new agrarian revolution, have also organized their activities better, carrying out plowing, sowing and feeding at a superior level of quality. Thanks to their selfless labor, the cereal harvest for 1984 is expected to be better than in the previous year, despite the cold weather of this spring which led to a postponement of some agricultural work and the prolongation of the period of maturation and ripening of the cereals.

At present, among the technical-organizational measures taken to assure good work progress, the leadership of the agricultural units is paying special attention to preparations for the cereal harvest campaign. Acting in full unity, the regional agricultural organs, the councils of some state and cooperative agricultural industries, the leadership of SMA, IAS, ITSALA and CAP have made themselves a slogan of better campaign organization. They have before them the valuable directive given by the general secretary of our party in a speech delivered at the plenary session of the Central Committee of the Communist Party of Romania in March of this year according to which: "In agriculture, too, decisive measures are necessary to realize all the programs which we have in the different branches and subbranches of this important sector of the national economy. We will arrange, then, in agriculture as well, for all that is necessary both in supplies and in necessary manpower. We have a capable peasantry which acts decisively; we have good technicians and specialists. Uniting all these forces, organizing the best

total activity, consolidating order and discipline, we can realize the established harvest this year, we can obtain a record harvest."

Acting resolutely to put this valuable directive into practice, the regional agricultural organs, on the basis of the orders and arrangements provided by the leadership of our ministry, have taken measures to have the units of their subordinates proceed on time to the verification and repair of all machines and agricultural equipment which will be used for harvesting, transporting and storing the new harvest, without losses, including those which could be caused by disrespect for the fire prevention norms.

Thus, as is well known, in recent years good experience has been achieved in preventing the potential causes of fires, in a large majority of districts, by taking effective measures which have resulted in the avoidance of many fires. However, it is necessary to emphasize that there have also been situations when, as a result of the fact that not all of the agricultural organs have taken the imposed measures on time, especially in the districts of Mehedinti, Caras-Severin, Ialomita, Giurgiu, Salaj and Maramures, many hectares cultivated with cereals as well as some combines, tractors and trucks have fallen victim to the flames. From an analysis of fires unleashed in the harvesting campaign of last year, attention is drawn to the fact that most of them broke out for reasons which could have been prevented, such as the following: sparks from the combustible gas exhaust of trucks, short circuits caused by certain improvisations in the electrical installations on combines and tractors, defects in the carburetion and friction systems of certain elements in movement, particularly in the combine. They were due to the fact that not all agricultural machines were adjusted completely and properly, that there was no demonstration of resoluteness in the precise application of the MAIA fire prevention norms, nor of the arrangements provided specially by the leadership of our ministry prior to the development of the cereal harvest campaign.

Starting from the conclusions and lessons of last year's experience, we must take all necessary organizational measures to prevent a repeat of the same state of affairs.

This year greater emphasis is being placed on the quality of agricultural machinery repairs. For that purpose measures have been taken to regulate the ignition, feed and carburetion systems in order to prevent false explosions, which are often accompanied by sparks or burning gases. Similarly, electrical conductors were waterproofed, electrical installations and exhaust gas devices were adjusted, and defects were removed which could have caused mechanical sparks or local overheating, in particular in the moving elements of agricultural machines.

All such preparations have already been completed in a large majority of districts; nevertheless, here and there, a few are reported to remain. This requires, in the time left till the beginning of the harvest, that efforts be intensified as quickly as possible to complete the repair and revision of all machinery and equipment which is intended to be used in the campaign.

From the experience of past years it turns out that the implementation of tests of machine function, the verification and gear-up of equipment, as well as adjustment and waterproofing play a decisive role in avoiding grain losses, in preventing some of the potential causes of fires. Similarly, the implementation of these tests is required, in a very responsible fashion, for all machines used in the harvesting and transportation of grains (combines, tractor trailors, trucks). At the same time we must not neglect the problem of assuring the full and safe functioning of the other agricultural machines and equipment such as for baling or harvesting, hay presses, gleaning and hay-stacking machines, etc.

At this time, on the basis of the directives provided, the activity of the receiving committees, which approve the utilization of machines in the campaign, is in full swing. Since, in some regions, carelessness has been found in the delivery of reports for verifying the technical state of agricultural machinery and equipment, we draw the attention of the responsible bodies to the proper high standards so that no agricultural machine or piece of equipment used in the campaign will develop any defect that would lead to the stagnation of the harvesting and transporting process or to the start of a fire. Likewise they should make sure that every piece of agricultural equipment and machinery is equipped with spark arresters as well as fire extinguishers, with powder and carbon dioxide in perfect condition.

The time remaining until the start of the harvest activity must be used to the best advantage to develop a solid instructional-educational effort through various means and devices--posters, banners, pamphlets, warning signs, radio broadcasts, articles written in the local press, etc. Special emphasis should also be placed on solid instruction, prior to the campaign, of machine operators and drivers, of mechanics and welders from teams that work in the mobile workshops, of cooperative members and of other workmen, so that they know and respect the provisions mentioned against smoking and working with an open fire in the proximity of fields or points of deposit for grain and hay, so that they will be vigilant in resolutely applying the norms for preventing and extinguishing fires, established for the safe maintenance and use of agricultural machinery.

With the aim of preventing field fires, both in the ripening phase and at the time of grain harvest, full attention must be paid to the guarding and supervision of the fields. Likewise, for the removal of some deficiencies noted last year in some districts, it is necessary to take firm measures in time to assure: the prevention of entry into the fields of combines, tractors and trucks which are not in perfect condition; the upkeep of places intended for the maintenance of agricultural machinery, refueling, or the implementation of operational service (mechanical or hydraulic adjustment, the tightening of chains with rollers, transmission belts, etc.) by mobile workshop teams; the creation of strips to insulate cultivated fields from roads, forested zones, railroads; the provision of operator positions with plows, harrows and fire stations which can easily be moved at the same time that the combines move to other harvest surfaces; the establishment of places for meal service, smoking, etc.

In practice it has been the case that the closer the harvesting gets to the end, the more the urgency diminishes and irregularities and apparent violations take place, noted also from the fact that the fires generally occur at the end and not at the beginning of the harvest time. This implies reminding the staff daily of the obligation to follow the norms for preventing and extinguishing fires precisely, with sanctions, where required, for any manifestations of negligence or lack of discipline. Likewise, it has been observed that agricultural machinery used for harvesting in the country's flat land has been sent into other areas with certain defects that could lead to the break-out of fires, as for example fuel and lubricant leakage, deterioration of electrical installations, intense friction in the moving elements of combines, etc. This implies that in the transfer of machinery from one zone to another special attention must be paid to its control. For, as equipment is used, the urgency of operational service to remove the potential causes of fire increases.

Rejoicing in the support of the party elements in implementing the technical-organizational measures intended to ensure the successful outcome of the grain harvest campaign, the leadership of our ministry, together with the rulers of MTTc, DCAPPA and MI, the Fire Engine Command, has established a series of joint actions concerning the control and guidance of fire prevention and recognizing activities that will support all of those engaged in the campaign for grain harvest transport and storage.

Conscious of their responsibility, and unfailing attention to the valuable directive provided by the secretary general of our party, Comrade Nicolae Ceausescu, agricultural workers are sparing no effort to have the fruit of this year's work reach the storehouses in complete security and are determined to celebrate the 40th anniversary of the Revolution of Social, National, Anti-fascist and Anti-imperialist Liberation and the XIII Congress of the party with the best possible results in their overall activity.

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## CREDITS FOR EXPORTING SHIPS, EQUIPMENT

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 22 Jun 84 p 6

/Article by M.: "Supplemental Credits from Yugoslav Bank: For Export of Ships and Equipment"/

/Text/ In two sessions the Executive Committee of the Yugoslav Bank for International Economic Cooperation approved credits for supplemental export financing of capital goods valued at 171.7 million dollars. Promises have been made for supplemental financing of 465.4 million dollars of exports.

In the latest issue of the Yugoslav Bank for International Economic Cooperation's INFORMACIJA /INFORMATION/, it says that the bank's executive committee approved a rather large number of supplemental credits for the export of capital goods valued at 62.5 million dollars (3.9 billion dinars). For capital goods export financing, including these cases as well, commitment of funds both from the bank and from business banks is anticipated. Funds taken from the bank for business banks represent an export of funds.

The supplemental credit approved will finance the export to France of two ships with carrying capacities of 33,000 DWT /dead weight tons/. The ships are valued at 270 million French francs, and they are being built by the 3 May shipyard in Rijeka. The bank has also approved supplemental credit for export to the GDR of machines for mining facilities. That equipment is valued at 4.4 million dollars and is being exported by the Belgrade firm Intereksport. With the help of the approved credits, construction machinery from the Krusevac factory 14 October will be exported. That equipment will be going to Nicaragua and is valued at 7 million dollars.

Supplemental credit is also approved for the export of Zastava passenger vehicles to stocks received on consignment in Great Britain, and they are valued at 6.5 million pounds sterling. The bank is also financing the export to Egypt of Vozila Gorica /Gorica Vehicles/ automobile and tractor trailers valued at 1.2 million dollars. In addition the decision has been made to finance the export of 1.1 million dollars of FAP-FAMOS trucks and spare parts to Nicaragua as well as the export to Czechoslovakia of special machine tools valued at 3.9 million dollars. Potisje lathes are being exported to the United States, with the aid of the supplemental credits of course.



In INFORMACIJA it says, among other things, that the bank's executive committee has also promised 310.9 million dollars worth of supplemental capital goods export financing. This promised supplemental financing is for, among other things, coal-fueled thermal power plant construction, delivery of 2,500 tractors, the export of railroad passenger cars, the rebuilding and expansion of cement plants, the construction of gas terminals, the export of three ships, the construction of four dairies, and the export of electrical equipment and other capital goods.

At the bank executive committee's May meeting it also approved supplemental credits to enable export of 6.3 billion dinars (109.2 million dollars) of equipment. The supplemental credit approved is for the export of two 79,000 DWT tankers, and their price is 61.2 million dollars. The ships will be built by Uljanik in Pula for a customer from Liberia. Also approved at that meeting was financing for the export to Egypt of 1,000 Torpedo tractors for 8.3 million dollars. Also the export of protection systems for transformer stations and long-distance power lines valued at 5.9 million dollars will be financed; they are produced by Iskra. Among the transactions with approved financing are the export to Egypt of 75 Dubrava buses valued at 2.2 million dollars and the export of 35 Sanos buses priced at 1.2 million dollars.

Supplemental financing has also been approved for consulting services for the first phase of construction of the Nekmete agroindustrial plant in Ethiopia. A plant construction study will be done by the Economic-Technical Institute in Osijek in collaboration with several institutions and research establishments. Also in this package of supplemental credits is the export to the GDR of mining machinery valued at 3.6 million dollars, the export of medical equipment to Cuba, the export of rental construction equipment to Algeria, ship rebuilding, and a larger founder role in the Elan joint venture in Austria.

At the second meeting the bank's executive committee promised that supplemental financing for 154.5 million dollars (5.1 billion dinars) of export deals will be made. These transactions are in the contracting stage.

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## COMPLETION OF 380-KILOVOLT TRANSMISSION LINE

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 26 Jun 84 p 4

/Article by Radmila Jovanovic: "'Djerdap' Absorbed Into Transmission: Construction of Basic 380-kilovolt Long-Distance Power Transmission Network Through Yugoslavia Completed"/

/Text/ Formal observance of the completion of the "Nikola Tesla" basic (main) 380-kilovolt power transmission network through Yugoslavia, which had been under continuous 10-year long construction, took place in Titograd in the middle part of this month. More precisely, on 13 June the network ring was completed with the startup of voltage transmission on the final section--Trebinje-Titograd-Kosovo--and on 14 June the successful completion of the electrical power transmission artery's construction was celebrated. In future, each section will in fact be able to transmit electrical power from our largest generating station, the 1,140-megawatt Djerdap /Iron Gates/ Hydro-electric Project.

With the construction of high voltage electricity-generating facilities, the existing 110-kilovolt and 220-kilovolt transmission network was incapable of receiving their electrical power output and transmitting it to consumption centers. And that is why it was no surprise when in 1973 the first section of the basic 380-kilovolt transmission network was installed, running from the Djerdap Hydroelectric Project and branching out in two directions, west and south, and no surprise when the transmission ring circling the entire country was recently completed at Titograd.

The 380-kilovolt long-distance transmission line from Djerdap to Belgrade was extended via Obrenovac (with a branch line to Novi Sad and Subotica) in the direction of Zagreb and the northwestern part of the country. And the long-distance line from Djerdap to Bor to Nis (with a crosswise connection through Kragujevac to Belgrade) was extended in one direction through Kosovo to Skopje and Negotino and in another direction through Montenegro, Hercegovina, Dalmatia, and the northern coast and linked up in Slovenia with the line coming from the eastern part of the country. This long-distance transmission line ring also has a crosswise connection from the southern to the central part of the country, and it will be supplemented by other necessary segments, so that several 380-kilovolt transmission line rings will be created in the future within the main ring.

## The Product of Our Own Capabilities

Along with the construction of the 380-kilovolt transmission network, high-voltage electricity-generating facilities have been built and have come into operation. The individual segments of the existing 110-kilovolt and 220-kilovolt transmission network were not capable of transmitting the power generated by those new facilities to all regions. So it used to happen that if, for example, water flooded the Djerdap Hydroelectric Project or the Drina electric plants, thermal power plants were put into operation using coal and oil and in spite of everything that could be done there was not enough electrical power in some parts of the country. And that was not all: the lack of transmission capacity of the existing network made it impossible to get assistance by way of electrical power from neighboring countries during periods of shortages due to damage or to increased consumption, or saturation of the transmission network's low capacity even led to power failure.

The construction of the 380-kilovolt transmission network, which cost about a billion dollars, is an example of how we have to work as a team and work together from the outset on such costly projects. A united concept of the development of this transmission network was adopted in the 1970's at a country-wide meeting of the most eminent experts from the electric power industry, the machinery industry, and the research world.

With the foundation laid by that meeting, a development program was prepared in the Yugoslav Electric Power Industry Association /JUGEL/ which was accepted by the self-management organs of the electric power industry organizations in the republics and provinces, and the International Bank for Reconstruction and Development rated that program highly and approved a loan on favorable terms for its participation in the project's construction. In addition, one-third of the funds were provided by electric power industry organizations from their own resources, and another third by business banks in the form of credit.

This electricity transmission network is the work of our Yugoslav planners, builders, equipment manufacturers, and contractors. And it is an example of how such a large-scale and costly project can be carried out with our own capabilities. The adoption of uniform technical parameters facilitated that and made it possible for the domestic machinery industry and electrical machinery industry to carry out 95 percent of the work on their own and thus for the bulk of investment funds to remain inside the country. That way the electric power industry can successfully maintain the transmission network without depending on imported spare parts, says Dr Lazar Ljubisa, general manager of Kosovo Electric Power Company, who in his capacity as longstanding chief director of JUGEL also has the most direct knowledge concerning the transmission network's construction.

## Branch From Italy Has Already Paid for Itself

With the completion of the construction of the 380-kilovolt transmission network, the Yugoslav electrical power system has come up to the European level. Indeed, all European countries have these more or less dismembered rings of 380-kilovolt transmission lines. And in fact, 380 kilovolts is for the time

being the highest voltage in Europe, although in the United States 750-kilovolt transmission networks do exist, and because increasingly higher voltage electricity-generating plants are being built they are even thinking about a 1,000-kilovolt transmission network.

With the construction of increasingly higher voltage electrical power plants, like the ones at Obrenovac, the capacity of some portions of this new transmission network of ours is now already cramped in terms of transmitting daily electricity output. That is the case for the section between Ernestinovo and Zagreb, and also for the crosswise transversal from Mostar to Sarajevo to Tuzla to Ernestinovo. In expert circles there is now talk about different variations of transmission network expansion in the period approaching the year 2000, the most vital thing being to decide whether it will remain at the current voltage level or will go to a higher one. And the determination will depend on transmission network expansion changes in the European countries bordering on our transmission network, with which countries we have very close ties and highly developed electrical power assistance relationships, says Radojko Vukosavic, secretary of the Coordination Committee for the construction of the Nikola Tesla 380-kilovolt power transmission network.

The electricity deficiency during the past 2 years has demonstrated that linkage of our 380-kilovolt system (along with the existing system with its 110-kilovolt or 220-kilovolt level) with neighboring countries, particularly Italy and Greece, is completely justified. Thanks to our 380-kilovolt connection with Italy at the Divaca-Redipuglia border, for example, our electricity situation last year was considerably eased. At that time there was being transmitted sometimes daily through that channel almost as much power as our largest hydroelectric facility--Djerdap--can generate in a day. Analysts maintain that this connection with Italy has already paid for itself and that there is no reason to set one up with Austria as well. For, says, Vukosavic, our cooperation with European electricity systems is extensive enough, whether one is talking about transit within Yugoslavia of electricity or procurement for our needs.

The completed 380-kilovolt long-distance transmission line is 3,931 km long and with its transformer stations has an installed capacity of 16,200 megawatts. This has brought the Yugoslav electrical power system in line with the large projects of this kind conceived along modern technical and technological lines in Europe and in the world at large. Building this system was a big job even for developed countries, but our good organization has demonstrated how even this job can be mastered when work is done in united fashion.

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- END -