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Soviet Union

Economic Affairs

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Soviet Union
Economic Affairs

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ECONOMIC POLICY, ORGANIZATION, MANAGEMENT

Model Regulations for Social Development Fund Issued

18200121 Moscow EKONOMICHESKAYA GAZETA in Russian No 13, Mar 88 p 20

[Model regulations: "Social Development Fund"; first paragraph is EKONOMICHESKAYA GAZETA introduction"]

[Text] We continue the publication of methodological materials on full cost accounting and self-financing (see EKONOMICHESKAYA GAZETA Nos 50 and 52 of 1987 and Nos 4, 6, 7, 10, and 12 of 1988). "Model Regulations Concerning the Procedure for the Formation and Utilization in 1988-1990 of the Social Development Fund of Enterprises, Associations, and Organizations Transferred to Full Cost Accounting and Self-Financing" approved by the Commission on Improving Management, Planning, and the Economic Mechanism are published in this issue.

These Model Regulations are worked out on the basis of the USSR Law on the State Enterprise (Association) and envisage the following procedure for the formation and utilization in 1988-1990 of the resources of the social development fund belonging to enterprises, associations, and organizations transferred to full cost accounting and self-financing (subsequently called "enterprises").

I. Procedure for Calculating Stable Standards of Formation of the Social Development Fund

1. The social development fund of enterprises is formed according to stable standards from the profit (income), which is left at their disposal and is a fund-forming indicator.

To calculate the standards of formation of the social development fund, first of all, the amount of resources assigned to this fund under the conditions of transition to full cost accounting and self-financing in accordance with the calculations of the five-year plan is determined.

For these purposes the social development fund established in the calculations of the five-year plan according to the indicators for 1988-1990 (over years) increases by the amount of outlays on the construction of housing and other projects for nonproduction purposes envisaged in the capital construction plan for the 12th Five-Year Plan (except for the outlays taken into account in the calculations of the five-year plan for the indicated purposes from the resources of this fund) and of the expenditures financed earlier from the budget and by way of profit distribution.

The list of resources, outlays, and expenditures included in the social development fund for the calculation of standards is presented in appendix No 1 to these Model Regulations.

2. Standards of formation of the social development fund belonging to enterprises planned to operate at a profit are determined by dividing the resources of this fund calculated in accordance with point 1 of these Model Regulations by the amount of profit (income) left at the disposal of enterprises for 1988-1990 (over the years).

To ensure the stability of the operating conditions of enterprises, standards of deductions into the social development fund calculated in accordance with point 1 of these Model Regulations for enterprises planned to operate at a loss are averaged over the years of the five-year plan.

An example of calculating averaged standards of deductions into the social development fund is presented in appendix No 2 to these Model Regulations.

3. For unprofitable enterprises and enterprises planned to operate at a loss the standards of formation of the social development fund are determined by dividing the resources calculated in accordance with point 1 of these Model Regulations by the amount of profit (income) and of the progressively declining subsidy for 1988-1990 for unprofitable enterprises and by the amount of savings obtained from the reduction of losses calculated in a running total in relation to 1988 and of the progressively declining subsidy for 1988-1990 for enterprises planned to operate at a loss.

The profit (income) and the progressively declining amount of subsidy is the fund forming indicator for enterprises showing little profit and the amount of savings from lowering losses and the progressively declining amount of subsidy, for enterprises planned to operate at a loss.

Examples of the calculation of standards for enterprises showing little profit and those planned to operate at a loss are presented in appendix No 2 to these Model Regulations.

4. Stable standards of formation of the social development fund belonging to enterprises are approved by ministries (departments) and state production associations in coordination with appropriate trade-union committees.

During the approval of standards it is necessary to ensure a correspondence between the amounts of the social development fund of enterprises and the amounts of this fund in a ministry (department) and a state production association as a whole (with due regard for the reserve of this fund).

A ministry (department) and a state production association in coordination with appropriate trade-union committees can differentiate throughout individual enterprises the standards of formation of the social development fund.

5. At enterprises transferred to full cost accounting and self-financing before 1 January 1988 the amounts of economic standards approved for 1988-1990 are retained.

II. Procedure for the Formation of the Social Development Fund

6. The social development fund is determined by an enterprise according to the plan and, actually, by multiplying the standard set in accordance with point 2 of these Model Regulations by the value of the fund forming indicator calculated in a running total from the beginning of the year.

The social development fund is determined according to approved standards quarterly.

At enterprises planned to operate at a profit, in whose plan losses are planned for individual quarters, deductions into the social development fund are made during quarters planned to be profitable on the basis of the planned annual amount of profit (income).

7. The amount of the social development fund of an enterprise calculated in accordance with point 6 of these Model Regulations can be increased from the resources of the reserve of the social development fund belonging to a ministry (department) and a state production association for a rise in the output of highly efficient, new equipment.

The establishment of a social development fund for newly commissioned enterprises and projects according to standards set with due regard for the normative periods of mastering production capacities is also envisaged from the resources of the indicated reserve. The amounts allocated for these purposes are envisaged in plans separately.

At the expiration of the normative period of mastering production capacities the indicated resources are not allocated for improving the housing and social conditions of workers engaged in the mastering of production capacities.

8. During the year the social development fund of enterprises is increased by the amount of resources obtained for the liquidation of debts on loans issued for improving housing conditions or for setting up a house.

III. Procedure for the Utilization of Resources of the Social Development Fund

9. The resources of the social development fund are spent according to an estimate. The draft estimate for the expenditure of resources of the social development fund is submitted to the labor collective of an enterprise for discussion and after its approval is confirmed by the joint decision of the administration, the labor collective council, and the trade-union committee and is attached to the collective contract. The administration and the trade-union committee inform the labor collective of the execution of the indicated estimate.

10. Labor collectives independently determine the specific directions in the utilization of the resources of the social development fund. The labor collective uses the social development fund for housing construction, all possible strengthening of the material and technical base of the social and cultural sphere, maintenance of its projects, implementation of sanitary and mass cultural measures, and meeting other social needs.

During the preparation of an estimate an enterprise assigns the bulk of the resources of the social development fund for the construction of dwelling houses, children's institutions, and other projects for social purposes.

If there is a shortage of the resources of the social development fund, enterprises can use bank credits.

In accordance with the decision of the labor collective the resources of the social development fund can be utilized, in particular, for:

implementing sanitary measures, including the acquisition of drugs for general health institutions, which are on the balance of enterprises, and of passes for rest, treatment, excursions, and trips along local routes on days off. The indicated passes are given primarily to advanced production workers in accordance with the joint decision of the administration and the trade-union committee;

implementing cultural-educational and physical culture measures;

lowering the cost of food in the restaurants (snack bars) of enterprise workers, primarily those working during the night shift; fortifying the diet of workers undergoing a course of treatment at preventive clinics and of children in kindergartens, nurseries, and pioneer and health improving camps of enterprises;

expenditures on improvements in collective gardens;

granting free material assistance for the initial contribution of internal resources for cooperative and individual housing construction, as well as for a partial liquidation of the credit granted for cooperative and individual housing construction;

granting young families an interest-free loan for improving housing conditions or setting up a house;

paying the difference between purchase and retail prices of agricultural products released by subsidiary farms for public dining, as well as paying the difference in the prices of fuel and purchased thermal power;

other purposes envisaged by measures for the social development of labor collectives.

11. The living space in houses built by way of share participation is granted to enterprises participating in the indicated construction by city executive committees—the only clients of construction of dwelling houses during the year, in which the commissioning of dwelling houses is envisaged.

12. The unutilized balance of the resources of the social development fund is not subject to withdrawal and is used during subsequent years in accordance with the general procedure and the approved estimate of its expenditure.

13. In coordination with the USSR Gosplan, the USSR Ministry of Finance, and the All-Union Central Trade-Union Council ministries (departments) determine the sectorial characteristics of application of these Model Regulations.

Appendix No 1. List of Resources, Outlays, and Expenditures Included in the Social Development Fund for the Calculation of Standards

The social development fund calculated according to fund forming indicators.

Outlays on the construction of housing and other projects for nonproduction purposes envisaged in the capital construction plan for the 12th Five-Year Plan (except for outlays taken into account in the calculations of the five-year plan for the indicated purposes from the resources of this fund).

The enterprise fund in the part assigned for social needs (40 percent).

Expenditures on covering the losses of housing and municipal services.

Expenditures on the maintenance of children's preschool institutions and other educational and public health measures.

Expenditures on the payment for the difference in the prices of fuel and purchased thermal power.

Expenditures on the payment for the difference between purchase and retail prices of agricultural products released by subsidiary farms for public dining.

Expenditures on the economic maintenance of projects for cultural-domestic and health improving purposes and pioneer camps.

The consumer goods fund in the part assigned for social needs (30 percent).

Remark.

Furthermore, to determine the calculated standard in a ministry as a whole, the additional social development fund for the mastering of new capacities is taken into account.

Appendix 2. Example of Calculating Averaged Standards of Deductions Into the Social Development Fund, as well as of the Profit Left at the Disposal of Enterprises (Residual Profit)

To average standards and the residual profit, the total amount of each of the three economic incentive funds for 1988-1990 is determined. After that all the three funds in 3 years are summed up and the amount of profit left at the disposal of enterprises in 1988-1990 is determined in such a way.

To determine the averaged standards of deductions from the profit into economic incentive funds, the total amount of each of these funds in 3 years is divided by the amount of profit left at the disposal of enterprises during the same period.

On the basis of the amounts of the material incentive fund envisaged in the five-year plan for these years and the averaged standards of deductions into the material incentive fund the amounts of profit left at the disposal of enterprises for 1988-1990 (over the years) are determined.

The social development fund and the fund for the development of production, science, and technology should be recalculated with due regard for the averaged standards and profit left at the disposal of enterprises. At the same time, if the calculated amounts of each of these funds are smaller than envisaged for the corresponding years in the five-year plan, the difference is compensated from bank credits.

Example

	1988	1989	1990	Amount for 3 years
Material incentive fund according to the five-year plan, thous.rubles	200	210	230	640
Social development fund according to the five-year plan, thous. rubles	100	110	130	340
Fund for the development of production, science, and technology, thous. rubles	200	300	400	900
Profit left at the disposal of an enterprise according to calculations of the five-year plan, thous. rubles	500	620	760	1880
Averaged standard of formation of the material incentive fund, percent (640X100:1880)	34.04	34.04	34.04	
Averaged standard of formation of the social development fund, percent (340X100:1880)	18.09	18.09	18.09	
Averaged standard of formation of the fund for the development of production, science, and technology, percent (900X100:1880)	47.87	47.87	47.87	
Profit left at the disposal of enterprises calculated with due regard for the averaged standard of the material incentive fund, thous. rubles	587.6	616.8	675.6	1880
587.6=200X100:34.04 616.8=210X100:34.04 675.6=230X100:34.04				
Social development fund calculated with due regard for the averaged standard, thous. rubles	106.3	111.5	122.2	340
Fund for the development of production, science, and technology with due regard for the averaged standard, thous. rubles	281.3	295.3	323.4	900

Ministries (departments) can apply other methods of averaging the indicated standards. At the same time, the amount of the material incentive fund, the social development fund, and the fund for the development of production, science, and technology should correspond to their calculated amounts adopted in the five-year plan and the amount of these funds of each subsequent year, as a rule, should be bigger than their amount during the preceding year.

Appendix No 3. Example of Calculating Standards of Formation and Amounts of the Social Development Fund for Enterprises Planned to Operate at a Loss

	Unit of measurement	1988	1989	1990
Calculation of the Standard of Forming the Social Development Fund				
Subsidy for coverage of planned losses and formation of economic incentive funds	thous. rubles	1000	700	600
Savings from reduction of planned losses	thous. rubles	-	300	400
Amount of subsidy and savings from reduction of planned losses	thous. rubles	1000	1000	1000
Calculated amount of economic incentive funds formed from profit according to the five-year plan for corresponding years—total	thous. rubles	400	500	600
Including the calculated amount of the social development fund	thous. rubles	150	200	250
Standard of formation of the social development fund	percent	15	20	25
15=(150:1000)X100				
20=(200:1000)X100				
25=(250:1000)X100				
Calculation of the Social Development Fund (Actual)				
Actual savings from reduction of planned losses	thous. rubles	-	350	350
Subsidy for coverage of planned losses and formation of economic incentive funds	thous. rubles	1000	700	600
Amount of actual savings and subsidy	thous. rubles	1000	1050	950
Amount of the social development fund	thous. rubles	150	210	237.5
150=(1000:100)X15				
210=(1050:100)X20				
237.5=(950:100)X25				

TV Discussions With Gosplan, Gossnab, Science Officials Summarized

18200116a Moscow AGITATOR in Russian No 4, Feb 88 pp 35-41

[Interviews with Genrikh Borisovich Stroganov, deputy chairman of the USSR Gosplan, Lev Alekseyevich Vorinin, deputy chairman of the USSR Council of Ministers, chairman of the USSR Gossnab; and Boris Leontyevich Tolstykh, deputy chairman of the USSR Council of Ministers, chairman of the USSR State Committee for Science and Technology, by L. Voznesenskiy, central television political observer for questions of the internal life of the USSR]

[Text] During the last 2 weeks before the beginning of 1988 on central television there were eight programs in the series entitled "On the Paths of Radical Reform" in which leaders of a number of the main economic agencies and ministries participated. The programs elicited lively responses from television viewers.

And this was natural: after all, the economic reform directly or indirectly, but in all cases very appreciable, affects the vitally important interests of literally every person. In the future it will be reflected in them in a profoundly positive way, although not without the painful breakdown of established ideas and customs, if it is conducted resolutely and comprehensively in the national economy and in each of its units, even the smallest ones. And conversely, the reform will not produce the improvements everybody expects and desires in the country's economic position, labor collectives, and each family if under the cover of slogans concerning restructuring at various levels of economic management we retain essentially the same, mainly command-administrative methods, if the independence of the enterprises is only formal in nature, and if true cost accounting, self-financing and self-supporting production do not become the norm of the daily life and activity of each worker, each collective, and the country's entire economy.

What is being done in the main economic agencies and ministries in order to implement the principles of the radical reform in the management of the national economy and its functioning under the new conditions is discussed in the materials published in this and the next two issues of the magazine. It goes without saying that it is impossible either in the magazine or within the framework of the television programs that served as a basis for these articles to encompass the entire complex of problems of the radical reform. But still its basic aspects will be touched upon to one degree or another and with respect to a number of essential issues both television and AGITATOR will continue both joint and independent presentations.

The Plan and Initiative Conversation With Deputy Chairman of the USSR Gosplan, Genrikh Borisovich Stroganov

[Question] The economic reform is directed toward strengthening the centralized planning basis in the national economy with ever more extensive development of the initiative of labor collectives and of each worker. What has the Gosplan done to change the enterprises and branches over to the principles of the radical reform, taking into account the solution to the general problem—an optimal combination of the plan and initiative?

[Answer] The new economic mechanism discloses broad opportunities for the development of initiative and creativity and creates conditions for intensification of production on the basis of the introduction of the achievements of scientific and technical progress. And here it is very important to determine the proportions, rates and sequence of the solutions to the problems facing the country and to turn away from old methods and traditions that have become entrenched in the economy.

This is not easy to do and it was necessary to do a large amount of theoretical and practical work in order to prepare the economic mechanism and the principles of the activity of the enterprises under the conditions of complete cost accounting. It was necessary to change not only the logic and ideology of economic thinking themselves, but, the main thing, in keeping with this to restructure the system of management of the national economy as well on the basis of expansion of self-management of the labor collective in combination with centralized planning.

The point of departure for the radical transformations of the economic mechanism is the Law on the State Enterprise. This is the first time such a law has been adopted in our country. It significantly expands the operational independence of the enterprises on the basis of granting them broad rights in resolving management issues and developing plans, but at the same time it also increases the responsibility of labor collectives to the client. It is envisioned that leaders will be appointed by election, as a rule, on a competitive basis, beginning with the brigade leader and ending with the director of the enterprise. The labor collective becomes the master of production, the controller of its activities, and an uncompromising opponent of technical stagnation, defective work, and theft.

[Question] But so far not all enterprises are immediately changing over to those very principles of complete cost accounting and self-financing that are an indispensable part of the law. Thus a fairly difficult situation is being created in the national economy. How will we operate under these conditions?

[Answer] The situation is, of course, difficult. But I would say that it is predictable during the transitional period. It has a number of peculiarities. An approved five-year plan is in effect. The system of wholesale trade, which is to encompass all material and technical resources, including means of production, has not yet been fully developed.

We are working under conditions of improving the existing price setting although even today it is permitted to conclude contractual commitments on the basis of contractual prices for new products.

And now in articles in the press and letters to the USSR Gosplan there are many complaints about the formation of state orders for the delivery of products. They say they are not large enough but they do not give the collective independence in concluding agreements with the consumers of the products. What is the situation in reality? The state order is approved by the USSR Council of Ministers and today it encompasses from 60 to 70 percent of the product output. But the ministries, afraid of losing the existing production ties, have established their own state orders for the production of products which are to be produced by the enterprise. Thus they have added to those established by the USSR Council of Ministers from 15 to 17 percent of the overall volume of production of products.

Having begun to develop the 1989 plan and having determined its concept, we are taking into account all those negative phenomena that are being revealed and, of course, we shall proceed toward a sharp reduction of the composition of state orders for the delivery of products, which will make it possible to expand the initiative and independence of labor collectives in forming the production program.

[Question] The concern with the current state of affairs with respect to the state orders and also the normatives reflects the uneasiness about the fate of the reform and its basic idea—cost accounting and independence of enterprises. And from this standpoint the line toward gradual but fairly energetic reduction of the level of state orders in the very near future and toward more precise formation of stable, long- term normatives is in principle correct. This is an indispensable condition for making sure that the reform will be really radical and will lead to a fundamental expansion of the independence of collectives of enterprises in the economic and social spheres.

[Answer] Of course you are right. The cornerstone in the economic reform is composed of stable and long-term economic normatives. They should provide for close coordination of statewide interests and the cost-accounting interests of the collectives.

An enterprise, having received a certain amount of profit should, naturally, settle accounts with the state budget. In particular, it should make payment for production capital—today we have established normatives of from 2 to 8 percent. For the first time we have introduced payment for labor resources—200-300 rubles per worker.

We must keep in mind that the results of the economic activity of the enterprises today are extremely varied. Therefore it is necessary to have deductions from profit into the centralized fund of the ministries and local territorial agencies so that they will be able to help the backward enterprises in eliminating their losses. This is also an element of the economic reform.

[Question] And still here one should be able to see a tendency toward the achievement of greater social justice. We have experienced a long period when poor economic results of weak enterprises were covered to a significant degree at the expense of collectives that were working well and the backward ones had essentially no incentive to reach any qualitatively new level. Such a situation should obviously recede further and further into the past. It is necessary to help the backward enterprises achieve a breakthrough, but mainly as a result of their own efforts. The general path of the development of the system of long-term stable economic normatives consists, obviously, in that they will become more and more average.

[Answer] But of course the normative is a delicate thing. And if it is approached with this kind of average measurement it can turn out that the enterprises that have new production capital and produce highly profitable products will receive a fairly high profit and cost-accounting. But those enterprises with outdated capital, whose products are produced at a loss or are less profitable, naturally, will not be able to have sufficient cost-accounting income for forming funds for the development of production, science and technology or for social development either. In order not to allow such a situation it is necessary to have funds from centralized sources and differentiated normatives. Experience in this exists, for example, in the USSR Ministry of Chemical Machine Building where the normatives of payment for fixed production of capital are differentiated for the various enterprises of the ministry depending on their technical condition and profitability of production, and payments into the budget—depending on the profitability of the products.

[Question] There is no doubt that with the colossal difference in the profitability of our enterprises today averaged normatives are practically impossible. But it is also impossible to allow them to arbitrarily establish normatives whereby the collectives that are managing with a high degree of effectiveness receive practically the same or sometimes even less money for their production and social development than do enterprises that have much worse results. Here we must find a scientifically substantiated position which would make it possible with the help of these normatives to live through the difficult transitional period and, on the one hand, eliminate losses of many enterprises and, on the other, not undermine the interest of collectives that are operating well in working even better.

[Answer] This problem is linked to the system of planning which will be in operation beginning under the 13th Five-Year Plan. Enterprises that produce products will develop and approve their own plans. Herein lies the essence of the new economic mechanism. The more

difficult the plan the more advantageous it is for the collective. Even today we have established that if the plans developed by the enterprise exceed the assignments of the five-year plan the deductions from profit into those funds that are left at the disposal of the collective will be increased to 70 percent.

[Question] We are receiving quite a few signals to the effect that up to this point the enterprises frequently receive excessively high and, unfortunately, unbalanced plans that do not take into account the actual level of their technical supply or production capabilities. Yet one of the basic ideas of the new system of management is the reliance on quantitative factors of economic growth, including the quality of labor and the quality of output. But what kind of quality can there be if the plan turns out to be unrealistic because of the volume or the shortage of resources? How does such a situation, which frequently arises under the banner of the need to fulfill the five-year plan, correspond to the principles of the reform? On the one hand we advise high quality and on the other—frequently the ministers and departments send down plans to their enterprises which significantly exceed their actual capabilities.

[Answer] The question, of course, is not a simple one. First of all because today we need both quality and quantity. For in the state balance one can distribute only that which is produced and we have immense shortages of resources. When forming state orders for the delivery of products under the plan for 1988 the USSR Gosplan took into account a full loading of production capacities and the changeover of enterprises to two- and three-shift work. Moreover the state order was fully provided with material and technical resources and the capacities that were introduced were fully provided with centralized capital investments.

[Question] It is understandable that we cannot neglect the quantitative side under modern conditions. But at the same time it is obvious that in many cases we can solve quantitative problems through improving quality.

[Answer] Indeed, our concern for quantitative indicators is accompanied by a solution to this problem, including through raising the technical level and improving the quality of products. This is our general line.

[Question] Many are asking for discussion of the improvement of the work of the Gosplan itself and all of our system of management of the national economy. In the Basic Provisions for radical restructuring of management of the economy approved by the June (1987) Plenum of the CPSU Central Committee it says that the primary thing in the activity of the USSR Gosplan should be constant adjustment of the economic mechanism, the creation of economic prerequisites for effective operation of enterprises, and the development of scientifically substantiated long- term stable economic normatives.

[Answer] It will be necessary to radically change the system for the formation of state plans, to increase the effectiveness of centralized planning, and to resolutely advance the boundaries of economic independence of the enterprises.

There will be a changeover to the development of a system of plans that is included in the Basic Directions for the Economic and Social Development of the USSR for 15 years, with a distribution of the indicators among the various five-year plans, and for the first five- year plan—among the years, as well as a state five-year plan with a distribution of assignments among the various years.

The USSR Gosplan in keeping with the Basic Directions will develop and in no later than a year before the beginning of the next five-year plan inform the ministries and departments of the USSR and the councils of ministers of the union republics of the initial data for planning as a basis for forming the five-year plan: control figures, state orders, and stable economic normatives and quotas. In turn, the ministries, departments and councils of ministers of the union republics will within a month submit these initial figures to the enterprises, associations and organizations.

The control figures that are not directive in nature are intended to reflect the social need for the products of the enterprises and the minimum levels of production effectiveness. They include: the indicator of the production of products (jobs, services) in value terms (calculated) in order to conclude agreements; profit (or income); currency revenues; the most important generalizing indicators of scientific and technical progress; and indicators of the development of the social sphere. During the period of the assimilation of the new economic mechanism the control figures can also include indicators of labor productivity and the material-intensiveness of products.

State orders that guarantee satisfaction of the most important social needs are issued to the enterprises: what is the startup of production capacities and objects of the social sphere from state capital investment? For the delivery of certain kinds of products necessary primarily for solving statewide social problems, fulfilling scientific and technical programs, strengthening the country's defense capabilities and providing for its economic independence; for deliveries of agricultural products and the production of individual kinds of industrial consumer goods. State orders are issued to the enterprise by the higher agency and can be distributed on a competitive basis. They must be included in the plan.

Long-term economic normatives are stable throughout the entire five-year plan. For the current five-year plan they are developed on the basis of assignments of the five-year plan. For the 13th Five-Year Plan the normatives will be determined before the development of the

plan so that the enterprises themselves can calculate their own production program under the conditions of self-financing and self-supporting production.

The limits establish the maximum amount of state centralized capital investments for the development of interbranch productions, new construction and the solutions to especially important tasks in keeping with the list of enterprises and facilities included in the state plan and the volumes of construction-installation and contracting work and centrally distributed material resources for satisfying the needs of production and construction. As wholesale trade develops the sphere of centralized distribution of material resources will narrow.

The list of control figures and long-term economic normatives and limits established for the enterprise is approved by the USSR Council of Ministers. And the ministry does not have the right to expand it. The composition of the state order is established by the USSR Gosplan and the state orders of the ministries—by them themselves in conjunction with the USSR Gosplan.

It is recognized as expedient beginning with the 13th Five-Year Plan to reject the existing practice of annual development and the approval of state annual plans for the economic and social development of the USSR as an independent form of planning, keeping in mind that the annual plans are not developed from the beginning each time but rely fully on indicators of the corresponding year of the five-year plan. Enterprises (associations) and organizations will independently plan for the forthcoming year the output of products, the performance of work and services, and also other indicators of economic and social development on the basis of their five-year plan.

Because of its new functions the organizational structure of the USSR Gosplan is changing significantly. While previously narrow departmental approaches prevailed in planning and the branch structure prevailed in management of the national economy, that is, each branch division looked after its corresponding branch, on 1 January 1988 we shall begin to work under the conditions of the functional structure of the activity of the USSR Gosplan while the structure of the apparatus was formed on the basis of national economic complexes.

Thus in order to provide for a unified national economic approach to the formation of the entire system of plans, we have created as a head complex one for consolidated national economic planning mechanism which includes consolidated divisions for national economic planning, long- range planning, scientific and technical progress, and so forth. In order to implement the party's social policy and plan priority development of the material base for the social sphere and the production of goods, services and commodity turnover, a complex for social development has been formed. The work for planning and development of the sphere of material production is organized in the cross-section of the following national economic complexes: machine building, defense branches, fuel-energy, metallurgical, chemical-timber, agroindustrial, construction, transportation, and communications. In order to solve the strategic problem of accelerating scientific and technical progress on the basis of active utilization of international division of labor, a complex of foreign economic ties has been created.

And this is not a mechanical replacement. Many functions which were previously assigned to the USSR Gosplan have been eliminated today. It is relieved of petty guardianship of each ministry and each enterprise. The Gosplan is eliminated from solving operational tasks and directs its work more toward the future, toward the determination of rates and proportions, toward the implementation of scientific and technical programs, and so forth.

The Gosplan has created an economic council which includes all managers of central economic departments. Its task is to provide for coordination of actions for the introduction of the new economic mechanism during the development of a plan so that everything is interconnected: prices, resources, production, construction, and so forth.

A commission is working actively in the Gosplan for improving the economic mechanism for planning and management of the national economy. It is the one that is responsible, in particular, for the task of clarifying all weak places which are discovered during the course of conducting the reform and taking into account those negative aspects which were revealed during the development of the plans so as not to repeat these mistakes in the future.

New in the Material and Technical Supply: Conversation with Deputy Chairman of the USSR Council of Ministers, Chairman of the USSR Gossnab, Lev Alekseyevich Voronin

[Question] Complete cost accounting presupposes the need to decisively change over to wholesale trade in material resources. What has been done in this respect and what are the immediate prospects?

[Answer] The operation of enterprises under the conditions of complete cost accounting and self-financing requires organizing material and technical supply and sale of products in a new way. On the one hand the enterprises must have a guaranteed opportunity to acquire with the money they earn material sources necessary for the production of products, technical reequipment, reconstruction and for solving their own social problems. On the other hand, while previously assignments in the plan for the production of products were sent down from above and the provision of resources for their output was provided through orders,

today all enterprises must study the demand and deliver products within the time periods and in keeping with the requirements of the consumers which are recorded in the agreements.

These two conditions are met most completely by wholesale trade—the basic form of material and technical supply under the conditions of the operation of the new economic mechanism. As was noted at the June (1987) Plenum of the CPSU Central Committee, it makes it possible to arrange in a new way economic relations among enterprises, which should be constructed on economic principles—mutual advantage and mutual responsibility as well.

We began to introduce wholesale trade in 1987. More than 10,000 enterprises, organizations, scientific research institutes and design bureaus were changed over to it, including all enterprises of the Ministry of Construction, Road and Municipal Machine Building.

Work under the conditions of wholesale trade has shown that the time periods for the order and provision of material resources for the enterprises are coming closer together. This has had an effect on the acceleration of the turnover of circulating capital and has contributed to a reduction of expenditures on material and technical supply, a reduction of "insurance" supplies at enterprises, and increased stability and reliability of supply.

For example, the Kuban agricultural combine, which has been operating under these conditions for 3 years now, has reached a point where today expenditures on raw and processed materials per ruble of output has decreased by 40 percent. Construction workers in Estonia in 1987 performed a considerable larger volume of contracting work than they did in the preceding year, practically without increasing resources.

But along with the positive aspects I cannot but mention the fact that a broad-scale approach to wholesale trade is impossible without the introduction everywhere of reliable economic regulators of the consumption of material resources.

Many enterprises of the Ministry of Construction, Road and Municipal Machine Building, for example, using wholesale trade has created large above-normative supplies, particularly of rolled metal. We hope that the changeover of enterprises to complete cost accounting will change the situation and force them to pay special attention to reducing the consumption of resources and to questions of savings.

[Question] You are always at the enterprises and talking with people. What is their attitude toward the possibilities of changing over to wholesale trade? Are they not losing confidence in the stability of material and technical supply?

[Answer] All meetings with managers and labor collectives show that at the enterprises they are enthusiastic about the changeover to wholesale trade. I am sometimes even alarmed that they are taking this so lightly. For it is an extremely complicated matter and not only for material and technical supply agencies. A great deal will have to be done by the collectives themselves: it is necessary to correctly calculate the normatives of production supplies, to clearly determine the need for resources, to develop provisions concerning bonuses for savings, and so forth.

[Question] Wholesale trade will only gradually increase its turnover and its scale. This creates a somewhat unusual situation in which two extremely different principles will coexist in material and technical supply. What problems can arise in connection with this and how should they be solved?

[Answer] In 1988 we intend to transfer no less than 15 percent of the material and technical resources to wholesale trade. This is 3.5 times more than in 1987.

During 1988-1990, when we will not yet have fully adopted all the anticost economic levers and incentives, when the proportion of state orders in the production plans of the enterprises will still be quite significant, we plan to transfer 60 percent of the volume of products for production and technical purposes to wholesale trade.

Even this year this will include entire groups of commodity output, particularly electrical equipment items, instruments, a number of construction materials, industrial rubber items, practically all specialized clothing and footwear, and other items and materials. For these commodity groups all consumers will be changed over to wholesale trade, regardless of their departmental jurisdiction.

Wholesale trade is being introduced fairly successfully in construction organizations. While in 1987 this was done in organizations of construction ministries of Armenia and Estonia, now they have been joined by construction ministries of Belorussia, Latvia, Lithuania, Moldavia, and Tajikistan, and a number of construction organizations of the Russian Federation. In order to check on the comprehensive approach to wholesale trade, in 1988 an entire region will operate this way—the entire national economy of Estonia.

[Question] One of the insufficiently resolved issues has to do with the juncture between branch and territorial planning and management as a whole, including material and technical supply. How are these issues being resolved now and what will be done in the future?

[Answer] A good deal that is new was introduced with the development of the 1988 plan. In principle we rely on what one might call a regional direction of development

of material and technical supply. This makes it possible to simplify economic ties and eliminate inefficient transits, from which both suppliers and consumers suffer.

We have consolidated the balance plans for distribution and thus made it possible for the enterprises—both the consumers and suppliers—to determine for themselves the assortment of the order and to refine the delivery dates. One can give the following example: for 1988 the Gossnab system has issued one-third the number of orders for the delivery of products that it did in 1987.

We are reaching a point where the provision of all products for intrabranch application is handled by the ministries themselves. They produce them, they own them, so why have extra agencies involved? Gossnab agencies are only assistants in this matter.

For the first time the 1988 plan for a number of large associations included functions of providing the national economy with their products under direct ties.

[Question] How are the functions of the Gossnab and the methods of its operation changing under the new conditions?

[Answer] We are concentrating basic attention on improving the balance work and developing wholesale trade and permanent stable direct production ties. The center of gravity is shifting to the territory, the region, and our main territorial administrations which today are becoming the main unit of the state system of material and technical supply.

In 1988 they will change over to complete cost accounting and self- financing. The basic task will be to improve the quality of material and technical supply. What will come to the foreground for these collectives is not the gross indicator of commodity turnover but the fulfillment of the orders of the consumers on time and according to the contracts. They will be economically linked to the industrial associations and should become their intermediaries.

The material and technical supply enterprises are being transformed from bases and warehouses into large industrial complexes which render various production services. Under the current five-year plan we have earmarked increasing our volume by a minimum of a factor of 3.

For the first time in 1987 a number of cities introduced leasing of road construction machines, excavators, bulldozers, and various cranes. There turned out to be so many who wished them that we have now earmarked creating these bases at at least 100 points, and during the five-year plan we intend to double this network.

There is to be extensive development of new kinds of activity, above all various kinds of services. One principally new thing is the creation in the territorial agencies of commercial centers where on a paid basis they will render the most varied services: exchange between enterprises of various products, the conclusion of transactions for the delivery of new, nontraditional kinds of products and their advertising, and the sale of products of cooperatives. The restructuring of material and technical supply is a very complicated process. It involves solving complex questions that are new for all of us. And in this matter special responsibility is placed on workers of the USSR Gossnab system.

Cost Accounting in Science: Conversation With Deputy Chairman of the USSR Council of Ministers, chairman of the USSR State Committee for Science and Technology, Boris Leontyevich Tolstykh

[Question] Figures from the USSR State Committee for Statistics show that during the past 2 years there has been an increase in the production of highly effective machine building products and the rates of their renewal have accelerated by a factor of almost 3. Yet in industry as a whole the number of new kinds of industrial products assimilated for the first time in the USSR remains at the same level. In this connection we should like to ask you to briefly outline the condition of scientific and technical progress in our country.

[Answer] In general, these data represent various processes. On the one hand, in our economy, including in the area of scientific and technical development, old methods of management have continued to be in effect and their slowing mechanism is far from broken. At the same time, these data reflect essential changes taking place in the process of restructuring. Demands for the quality and technical level of products have increased sharply and therefore weak developments have been rejected and have not gone into production. Moreover, now it is necessary to create both machines of a higher level and entire systems of them and complex lines. And they are also considered as units of output.

[Question] As we know, our major task is to create not simply new technical equipment, but above all qualitatively new equipment that is capable of raising labor productivity to a principally new level both in each work place and in the national economy as a whole.

[Answer] I agree. It is necessary to begin to solve large problems and accelerate technical progress not only through a multitude of small developments but above all as a result of principally new technical equipment.

[Question] How is the State Committee for Science and Technology strengthening the economic direction of its activity?

[Answer] This work has become constant in the activity of the committee. But one cannot say that we have already reached a point where this situation suits us. We now have a special subdivision, a very small one—only a couple of people, which in conjunction with specialists of

other central economic departments solves methodological problems and conducts organizational and explanatory work. First and foremost it is now involved in the introduction of cost accounting and science. We are analyzing the tendencies that are manifested during the introduction of the new economic mechanism in scientific institutions and revealing both positive processes and negative aspects in various forms of integration of science and production. There are many problems here and we are trying to reveal and eliminate the obstacles and open up the way for more progressive new forms.

[Question] We have many questions related to the activity of scientific research institutes and design bureaus which can be generalized as follows: what is taking place in them and what should take place in connection with the utilization of cost accounting principles?

[Answer] In September 1987 the CPSU Central Committee and the USSR Council of Ministers adopted the decree "On Changing Scientific Organizations Over to Complete Cost Accounting and Self-Financing." In 1988 almost half of the scientific research institutions and organizations will change over to the new conditions—more than 2,500 of them. This is a very complicated process. We are coming up against the fact that the level of economic education in science is perhaps lower than in industry. Therefore it is necessary to teach people the fundamentals of economics, although there are many scientific institutions which prepared promptly for the new conditions and feel confident.

Take the Experimental Scientific Research Institute of Metal-Cutting Machines (ENIMS)—the head institute of the Ministry of the Machine Tool and Tool-Making Industry. There they determined very clearly how many jobs they have, how many of them there would be under the agreements, and how to increase their profit and capital. They began to arrange cost accounting within the institute and interaction among the subdivisions. Funds will now be allotted for the development of particular subjects to the head subdivision—division, laboratory—and they will determine the distribution of these funds among other subdivisions.

I wish to emphasize that the changeover of science to new methods of management is a matter that is perhaps more complicated than it is in industry. The essence is that we have essentially no experience in this. Therefore it is now necessary to take very energetic measures.

[Question] It is known that cost accounting in industry, agriculture and other branches of the economy "works" only when it is taken not only to the level of the enterprise, but also the shop, section, brigade and, in the final analysis, literally to each worker. And in this sense, apparently, it is very important that within scientific research and design organizations cost accounting is brought to the level of the division, laboratory, and each scientific and technical worker.

Take the example of that same ENIMS. The institute has good developments and systems of machines and it is known throughout the country. But in this institute there are many trivial, narrow projects. It has 49 areas—it is impossible to do this many well and it is necessary to consolidate the subject matter and clear out the trivia.

We are now coming to an end to the "feed line" when scientific organizations were given money simply so that they would investigate something. We need large-scale developments that produce a real effect. Mass scientific organizations must be able to provide that everything they propose actually will be advantageous to the enterprise. And the main thing is that we have changed over from financing scientific institutions to financing specific areas, subject projects, and developments on a contractual basis.

[Question] The new economic system should make an economic reprimand to those scientific institutions whose level of developments does not meet the requirements of the present day and the future. So what is being done to those who for various objective reasons still cannot reach this level? Will they be given any assistance if it is quite clear that their work on problems is necessary to the country?

[Answer] This question exists. Scientific organizations that end up in a difficult situation can be supported, but this support should not be turned into a simple subsidy or some kind of gift. For example, the ministry should listen attentively to the explanations of the leaders of the institute or design bureau and consider the measures suggested by the collective. The higher organization can make orders for certain developments and finance them even if the immediate clients do not believe in their effectiveness. They can be given a certain amount of time and if it works that is good and if not then, probably, more decisive measures are needed.

Of course, in each specific case it is necessary to act taking into account the given situation and circumstances, and in no case should one act on the spur of the moment. But in principle we must consistently introduce cost-accounting principles into the activities of the scientific organizations if we intend actually to accelerate scientific and technical progress.

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Statistics Published on National Income Used

18200161 Moscow VESTNIK STATISTIKI in Russian No 1, Jan 88 p 80

USE OF NATIONAL INCOME FOR CONSUMPTION AND SAVINGS, 1970-1986 (in current prices; billions of rubles)

	1970	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
1. Национальный доход, использованный на потребление и накопление	285,5	363,0	383,0	399,4	420,6	432,9	454,1	477,9	512,9	536,4	559,0	568,7	576,0
2. Потребление	201,3	266,4	279,7	292,5	307,9	323,6	345,5	364,9	378,5	393,0	407,2	418,4	427,6
3. в том числе:													
4. личное потребление населения	177,9	231,2	242,0	252,6	265,1	278,6	297,7	314,8	325,0	336,4	348,2	356,9	363,6
5. материальные затраты в учреждениях, обслуживающих население	16,6	24,6	26,7	28,2	30,3	32,0	33,5	35,0	37,5	39,3	40,6	41,8	43,5
6. материальные затраты в учреждениях науки и управления	6,8	10,6	11,0	11,7	12,5	13,0	14,3	15,1	16,0	17,3	18,4	19,7	20,5
7. Накопление и прочие расходы . .	84,2	96,6	103,3	106,9	112,7	109,3	108,6	113,0	134,4	143,4	151,8	150,3	148,4
8. в том числе:													
9. прирост основных фондов . .	51,1	62,5	59,6	60,1	66,1	62,3	69,4	65,9	69,9	73,7	80,6	80,2	87,0
10. из них:													
11. производственных	32,1	40,8	39,3	38,4	43,8	39,9	45,5	41,6	46,6	45,4	48,4	46,1	50,4
12. непроизводственных . . .	19,0	21,7	20,3	21,7	22,3	22,4	23,9	24,3	23,3	28,3	32,2	34,1	36,6
13. прирост материальных оборотных средств и резервов . .	33,1	34,1	43,7	46,8	46,6	47,0	39,2	47,1	64,5	69,7	71,2	70,1	61,4

Key:
1. National Income Used for Consumption and Savings
2. Consumption
3. including:
4. Population's Personal Consumption
5. Material Costs in Establishments Serving the Population
6. Material Costs in Scientific and Management Establishments
7. Savings and Other Expenditures
8. including:
9. Growth of Fixed Capital
10. of which:
11. Productive Capital
12. Nonproductive Capital
13. Growth of Material Working Capital and Reserves

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INVESTMENT, PRICES, BUDGET, FINANCE

Options for Retail, Wholesale, Contract Price Reform

18200125a Moscow EKONOMICHESKAYA GAZETA in Russian No 12, Mar 88

[Article by Yu. Borozdin, doctor of economic sciences and professor, under "The New Economic Mechanism" rubric: "Problems of Radical Pricing Reforms"]

[Text] **Editorial comment: The urgent problems of restructuring the pricing system under the new economic mechanism have also been examined in the articles "The Market Has Its Own Laws" and "Cost-Accounting [Khozraschet]: Relationships of Interests" (No 9, 1988), "The Enterprise Law and Pricing" (No 47, 1987), "Restructuring Wholesale Prices and Self-Financing" (No 48, 1987) etc.**

We invite our readers to express their views on ways to radically reform our pricing system and to take part in the discussion under way here on the problems of restructuring and the pricing mechanism.

It was only fairly recently that all the measures related to prices and pricing went under the slogan of bringing prices closer to publicly necessary labor inputs. At the same time, there was a great deal of talk about the growing role played by prices in stimulating NTP [scientific and technical progress], in rationally using productive resources, and in economizing and thrift. However, the major flaws and disproportions which have accumulated in the price-setting system, which were mentioned in the CPSU Central Committee and USSR Council of Ministers decree "Basic Directions for Restructuring the Pricing System Under the New Mechanism", have diminished the active economic role prices play in guiding the national economy and have failed to create conditions for improving the economic mechanism and production efficiency and conserving resources. The policy for setting prices for production and technical output and consumer goods has been distinctly set forth. In the first instance, it was usually a case of the need to reflect the changing conditions of producing and selling output which, in practice, was done by consistently letting increasing production costs dictate prices. The main factor in the second instance was the announcement of the need to support stable price levels for consumer goods and services.

Thus, wholesale and purchase prices and estimated prices in construction began increasing intensively beginning in the mid-1950's. Here, all recent price reviews were made according to a cost scheme: as the prime output costs in the nature-exploitative sectors rose, prices for natural raw materials went up. This then led to increased costs and prices in all the other sectors.

As for the cost-based economic mechanism as a whole, the flaws in cost-based pricing have been seriously criticized in recent years. There is no need to go over this subject again, but I would like to pay particular attention to one circumstance. Practice provides hints that the path of prices which follow production costs is a dead-end track which cannot lead to solutions to today's extremely complicated economic problems. Quite to the contrary, keeping the cost-based pricing methodology will only serve to aggravate the stagnant state of the economy.

Prices can fulfill their real economic role only as one of the active levers used to bring supply and demand into a state of balance. If this natural principle is ignored, we will not succeed in breaking the vicious "costs-prices" circle. In essence, one and the same scenario keeps being repeated. Costs rise, making it unprofitable to produce the fuel and raw-materials complex' output for which the prices were raised in the first place, and this increase subsequently spreads throughout all the other sectors; it once again rises to a new level in the fuel and raw-materials complex and necessitates a new price reform. This is not surprising, since the same problems which were solved during the last and more comprehensive price reviews have now arisen anew.

It seems impossible for us to solve these problems while keeping to the old content and pricing methods.

For 20 years the policy for setting prices on consumer goods and services has been based on the principle of maintaining stability and economically justified price reductions as corresponding goods resources are produced and production costs are lowered. For a number of reasons however, we have failed to maintain this principle with consistency. While prices for certain foodstuff necessities have remained unchanged, the process of hidden price increases has actively continued as a result of our doing away with a relatively inexpensive array of industrial goods, increasing our average purchase prices and allowing greater increases in prices than in the qualities of the goods. The market for consumer goods and services has diminished and the overall and structural imbalance between the purchaser's supply and demand has intensified.

Simultaneously, the entire pricing system has undergone a deformation. The retail price level for a great many foodstuffs has turned out to be lower than the wholesale and purchase prices, and with each passing year this has led to increases in state subsidies, which presently come to over R73 billion per year.

All of this results from haven taken an unintegrated approach to a mutually coordinated pricing system and having ignored real economic regularities.

The task of carrying out an overall reform of prices in the national economy was fully developed in the decree of the 27th CPSU Congress and the June (1987) CPSU Central Committee Plenum. And for the first time in our practice we are referring here to a radical and mutually coordinated restructuring of all types of prices—wholesale, purchase and retail.

What is the goal of this reform? The content and the methods used to review prices and tariffs in all sectors of the national economy depend to a great extent on the answer to this question.

We believe it consists in setting price levels and relationships for basic types of goods and services which would do the most toward balancing supply and demand in the national economy. In bringing this about, we must work out a radically new pricing mechanism which combines state planning of stable prices for key goods and services, within the framework of the five-year national economic plan, and the widespread use of contract prices for an array of products numbering in the millions.

A mutually coordinated reform of all types of prices also requires a radically different approach to its organization and execution. In our opinion, the reform should progress from the prices for the finished product—i.e. the retail prices—to the prices for output produced by the processing sectors, and from there to the prices for initial raw and other materials.

Why are retail prices the most important in this reform? First, because the production of consumer wealth is the finished product of public production, and from this standpoint initial natural raw materials represent nothing more than intermediate output, and have no intrinsic

value. It is obvious that national economic planning, which is oriented toward meeting the greatest needs, must have as its initial position the priority of the finished product. Since retail prices represent the value of the finished product, they also play a determinant role in balancing the major proportions of the national economy.

Second, the retail price are, by their very structure, de facto final sales prices. They include both wholesale prices for production-technical industrial output and purchase prices for raw agricultural materials. Of course, this does not exclude the well-known autonomy of wholesale and purchase prices, particularly with regard to output earmarked for intra-economy circulation. However, when the question of the mutually coordinated restructuring of all types of prices arises, both wholesale and purchase prices and tariffs for production-related services certainly become less important, and all measures aimed at improving them can generally be examined through the prism of retail prices.

What exactly is the present state of the retail pricing system and what are we seeing as the principle directions for radically restructuring this system while defining the tasks associated with reforming wholesale and purchase prices?

The most characteristic sign of the existing retail price system is the fact that it is being used in an unbalanced market of consumer wealth, where effective demand outstrips supply. As mentioned in the USSR Goskomstat [State Committee on Statistics] report "Results of Fulfilling the 1987 State Plan for the USSR's Economic and Social Development", the turnover of retail goods in state and cooperative trade amounted to R341.1 billion and increased compared to 1986 (in actual prices) by R9.2 billion. However, the population's cash incomes increased faster than the goods turnover and the consumption fund, which resulted in increased unsatisfied demand. Moreover, in a little over a year, the population's savings bank accounts grew by R24 billion.

The entire pricing system is undergoing increasing deformation, as are purchase and wholesale price levels for animal-breeding output and some crops, and have even surpassed retail prices. This has resulted in increased state subsidies within the economy.

The outstripping of supply by purchasing demand attests to the inflationary nature of the economy's growth, but with one definite characteristic, i.e., the fact that prices do not automatically act as regulators for bringing supply and demand into correspondence. Administrative pricing allows us to carry out strict state verification of prices for necessities and keep their price levels stable for years, especially for the goods in the stabilized assortment having unchanging consumer properties. These are primarily the food group's goods whose retail prices have remained unchanged for decades, even in the face of major, and often increasing, shortages.

Prior to now, many economists and sociologists have considered this a correct policy and see it as one of the achievements of socialism in our country which ensures that all strata of the population maintain a stable level of consumption of basic foodstuffs and industrial consumer goods. One can concur with this view only when there are no market shortages of consumer wealth. This is not the case in practice, and is why the real consumption structure of various social groups of the population is seriously deformed.

In a situation such as this, the relatively low state retail prices for many foodstuffs, particularly from the meat and milk groups, not only fail to fulfill their social function, which is to ensure roughly equal consumption conditions for all of the population's income groups, but quite the contrary, they worsen the material well-being of the low-income groups while improving it for the high-income groups.

The existing state retail prices for certain chronically scarce foodstuffs no longer solve either economic or social problems. On the contrary, they only aggravate the tension in the consumer wealth market and create opportunities for unearned incomes.

What precisely can be done to correct the situation?

It seems to us that we need to aim at creating a balanced market for consumer wealth. In so doing, we need proceed from two realities. First, the limited opportunities available in the next 3-5 years to solve the problem of increasing our supply of consumer goods to the level of the purchase demand at the present retail price level. Second, the impossibility of diminishing the purchase demand for this same period to the level of the supply of goods, since to accomplish this we would have to reduce or at least freeze the cash incomes of many groups of our population.

This means retail prices will have to play a more active role in bringing the consumer wealth market to a state of equilibrium. This also predetermines the direction to be taken in radically reforming retail prices, the result of which, we believe, will necessitate raising the prices for foodstuffs while leaving prices for industrial goods unchanged.

As this occurs, per capita compensation payments equal to the retail price increases should be set up for low- and middle-income consumer groups. In this connection, it would be well from this point on to remove all limitations on upper income levels (with progressive taxation), making them dependent on the labor success rate.

As for wholesale and purchase price reforms, it appears that we first need to overcome their deformation vis-a-vis retail prices. It is mandatory that wholesale and purchase price levels be lower than those for retail prices. Along with this, it is critical that both purchase and wholesale prices fully reflect the useful effect of the

output and its purchase value. An important factor which should be considered when reforming wholesale and purchase prices is the extent to which the outlays connected with making compensation payments to the population for certain retail price increases are "made more expensive". By and large, this is a primary opportunity for keeping purchase prices unchanged overall and even for lowering them somewhat, for changing prices for individual types of output only a little and for carrying out a long-overdue transformation in price-setting methods.

Wholesale prices for industrial output are generally high enough and ensure substantially higher profits than industry's own capital investment requirements. Thus, industry's profits for 1986 amounted to R112.3 billion, with R71 billion in capital investments. This shows us that for industry overall, the conditions for self-financing are more than being met. This is why, despite the prime production costs being raised somewhat because of the compensatory payments made to workers because of retail price increases, we have an excellent opportunity to lower the overall level of wholesale prices for industrial goods. Particularly favorable opportunities to lower prices have come about in our metallurgical and machine-building complexes, where capital investments and profits for 1986 came to R6.7 billion and R13.7 billion, and R17.9 billion and R33 billion respectively.

The opposite occurred for fuel-energy and construction complex output: profits for 1986 in these sectors were not enough to cover in-house capital outlays. This is why the price reform in these industrial sectors should raise prices, which will help eliminate the principal drawback of wholesale prices, i.e., their comparatively lowered level for output produced by the nature-exploitative sectors and their raised level for output produced by the processing sectors.

The principal changes in the pricing mechanism itself are dictated by the new system for controlling the national economy, which is now being set up and based on economic methods.

Setting prices for key structure-determining goods is the prerogative of superior economic administration organs which, when validating price levels, start from the national economic growth macroindicators which are formed in the plan, from necessary structural shifts and investment policy, and from planned market conditions. At the same time, a determination is made of the degree of influence these prices exert on cost accounting [khozyaystvennyy raschet] in sectors, works and individual associations and enterprises. Prices for key goods which have been put into the state plan-order should create additional material motivation on the part of the enterprises hoping to fill this order.

A major requisite is also the coordinated development of the plan's global features, which are used to verify figures and prices for the most important of the national economic plan's goods for the purpose of balancing its natural-material and cost ratios. On the whole, this approach can be seen as that vertical section of national economic planning where state regulation of the price-setting process is decisive.

At the same time, contract relations and contract prices are assuming a decisive role in the ongoing economic activities of those associations and enterprises which operate on cost-accounting principles and the horizontal production links they have established among themselves.

Two criteria must exist with regard to the contract price level: first, the prices for key goods (on which the prices for all other goods depend in one way or another) and second, the ceiling and profitability for manufacturing (for example, the double standard for profitability), which can be set by the state. Moreover, when concluding an economic contract and arriving at a contract price, the producer-enterprise must submit to the client all necessary estimate materials, primarily the costing upon which contract price levels are based.

Should disagreements arise concerning the contract price level, arbitration must be handled by the State Price Inspectorate, which can function both at the Center and locally. However, where narrow product specialization exists among a great many processing sector enterprises, there would likely be a manifestation of monopolistic tendencies, i.e., a policy of dictation on the part of manufacturers, including when setting contract prices. How can we combat this?

Obviously, the state will have to bring influence to bear first anyway, and prior to the widespread introduction and "test runs" of economic regulators, particularly the mechanism of progressive taxation of superprofits. For example, a limiting profit ceiling should be set for enterprises which constantly permit prices to be raised, with all profits above this ceiling confiscated to the budget. However, from here on, economic standards—payments made by enterprises for their production resources—need to be put fully in effect according to unified rates stabilized for the duration of a five-year plan period and for the progressive taxation scales for above-norm profits. It is precisely the latter which should induce enterprises to allow themselves to be guided by optimal contract price levels which preclude attempts to sharply raise them, since this would still have no effect on the economic well-being of these enterprises.

As we can see, many of the problems associated with radically reforming the pricing system can be solved not only through a one-time review of wholesale, purchase and retail prices, but primarily by devising a radically new pricing mechanism tailored to the system of economic operation now being developed in Soviet economics.

12659

INDUSTRIAL DEVELOPMENT, PERFORMANCE

More Worker Participation in Quality Control Suggested

18200155 Moscow IZVESTIYA in Russian 9 Apr 88 p 1

[Article by Yu. Rytov:"Are Millions of Controllers Necessary under Khozraschet?"]

[Excerpts] The USSR State Committee for Statistics [Goskomstat] has suumed up the results of a selective study of workers, employed in technical product quality control in industry and construction. The study was carried out at 29 thousand industrial enterprises and 28 thousand construction organizations with a general number of 44 million people employed.

I recall my trip to Naberzhnyye Chelny, to KamAZ, at the end of 1986. They had just introduced gospriyemka there, as at many other enterprisesin the country.

Gospriymeka's first steps already showed that 12 percent of the technological operations were fulfilled with serious violations. Even the main conveyor had to be stopped. Naturally, all the production indicators were lowered and people's wages fell. However, almost no one grumbled. Everyone understood that gospriyemka was obligatory and an extremely necessary matter. It was completely obvious to everyone that the service for technical control for various reasons—both objective and subjective—was not in a condition to ensure the high quality of production.

We then calculated that at KamAZ there are almost 5,000 technical controllers. Approximately 1500 people work in various laboratories and quality services. And gospriymeka, even in an incomplete form, counted for more than 200 people. Seven thousand people employed in technical control! Isn't this too much even for such a giant like KamAZ?

Goskomstat's study showed an even more impressive picture—on the scale of the whole country. Judge for yourself. In only those industrial enterprises included in the study 1,068,800 people are employed in quality control (without gospriymeka). In construction organizations it is 40,600. This corresponds to 3 and 0.5 percent of the general number of people employed at enterprises and in construction organizations.

Who are these people? At industrial enterprises 7,000 people occupy the positions of deputy directors for quality. There are 31,000 chiefs of subdivisions and their deputies. There are 10,300 laborotory workers and 831,000 workers. There are 58,400 other workers. In one industrial enterprise on the average there are 24 workers in the services of technical control.

I remember that the numbers cited refer only to the enterprises and organizations studied by Goskomstat. In all, the annual number of people employed in the economy now comprises 131.3 million. Compare this number with the number of people employed at the enterprises studied and with a definite degree of certainty we can imagine the circle of people employed in technical control on the scale of the whole economy. The number runs into the millions!

In fairness we must note that in recent times the number of such positions has somewhat decreased. In particular, in the enterprises studied it decreased by 8.1 percent in the last 10 years. To a significant decree this was determined by the introduction of technical means of quality control of production. However, as is known, in recent years gospriyemka has been added to the services of technical control. In the third quarter of last year 30,800 people were included in it. This year it has grown even more, inasmuch as the number of enterprises and organization where gospriyemka is active has broadened.

I recall once again the conversation with the workers at KamAZ. They have realistically evaluated the situation. Yes, quality is a general task. Yes, gospriyemka has shown its viability and efficiency. But is it necessary to maintain the former functions and former statys if the services of technical control under the new conditions? Wouldn't it be better for a small additional payment to transfer this function to a workers' brigade?

I think that there is logic and healty thought in such opinions. We are trying to achieve khozraschet in every brigade and in every working place, and to directly connect it with the quantity and quality of labor. And who should control the quality of his production if not the worker himself?

Control is needed over the number of controllers.

Uzbek SSR Proposes Economic Reorganization, Seeks Comments

18200127 Tashkent PRAVDA VOSTOKA in Russian 1 Apr 88 pp 1-2

[Article under the "To Greet the Session of the Uzbek SSR Supreme Soviet" rubric: "Basic Principles of the Draft General Plan for Administering the Uzbek SSR's National Economy"; first paragraph is PRAVDA VOSTOKA introduction]

[Text] **In connection with the forthcoming Eighth Session of the Uzbek SSR Supreme Soviet, 11th Convocation, the Presidium of the Uzbek SSR Supreme Soviet herewith publishes the basic principles of the Draft General Plan, as worked out by this republic's Council of Ministers, for administering the Uzbek SSR's national economy.**

The contents and the thrust of this republic's proposals with regard to improving the management of the national economy, proposals which stem from the party's economic strategy elaborated at the 27th CPSU Congress, as well as the program positions of the June(1987) Plenum of the CPSU Central Committee, provide for the creation of a firm organizational foundation for accelerating the Uzbek SSR's socioeconomic development and for enhancing its role in strengthening the country's integrated national-economic complex.

Carrying out a major administrative restructuring within the framework of the work being conducted by the party on creating an integrated system for managing the economy is particularly important for the Uzbek SSR in connection with the fact that the growth rate and the proportions of public production which have evolved during the last few years do not measure up to the requirements of a socialist society's present-day stage of development, nor to this republic's possibilities and resources, while the measures which have been undertaken in the field of administration have been partial and local in nature; they have failed to provide the necessary effect.

A sharply negative influence on the national economy's level and efficiency was exerted by the insufficient grounds for, and quite often the subjective approach to, the choice of directions for economic development and the utilization of natural-economic resources, as well as by underestimating the importance of acute social problems, particularly the employment of the able-bodied population. There was a lack of effective methods for improving territorial production organization, taking into account and utilizing regional characteristics in the development of all-union specialization and increasing the economy's comprehensiveness, effective methods of financial-economic interrelations between this republic and the national-economic complex of the country as a whole. Within the administrative system the union structure was blindly copied, declaratively proclaiming the principle of democratic centralism, which in practice is frequently replaced by administrative-command methods, a petty type of guardianship, multi-level monitoring controls, a rigid centralization, and dominance of the bureaucratic approach to making decisions. In the final analysis, this has led to a sharp increase in the numerical strength of the administrative machinery and the expenditures required to maintain it.

Within a relatively brief period a number of ministries and departments were formed, as well as two new oblasts, more than 40 rayons, a large number of cities, urban settlements, and kishlaks [Central Asian villages]. Enterprises, associations, and organizations now located in this republic are under the jurisdiction of more than 100 ministries and departments. More than half of them are union-republic or republic types.

From 1970 through the present time, while there was a 67-percent increase in the number of people employed in the national economy, the number of administrative-management personnel decreased by a factor of more than 1.7, whereas outlays to maintain them almost doubled. The proportion of the administrative machinery withing the number of employees amounts to 14.5 percent, which is higher than the average union level. Maintaining this trend, as calculations have shown, would lead by the year 2000 to almost a doubling of the administrative machinery, and 1,200,000 people would be needed for this purposes.

The organizational structure of most sectorial administrative organs comprises three units, but several sectorial organs have four or five units.

The principle of territorial administration turned out to be minimized. Questions regarding the economic development of oblasts and rayons, as well as the distribution of production forces, were frequently decided from narrow sectorial points of view. This violated the balance and comprehensiveness in regional development, and it led to the under-utilization of resources; it retarded the solution of social problems and the rise in the population's standard of living. The system of administrative-territorial division of the republic came into conflict with the objective requirements of economic districting.

The organizational-structuring which had been carried out earlier failed to provide the necessary effect in connection with the non-comprehensiveness and partial nature of the reforms. Organizational innovations were not combined with changes in the economic mechanism, and they failed to attract the interests of enterprises to a sufficient degree.

As a result, the administrative system which has evolved at the present-day stage is characterized by a clumsy awkwardness, multiple units, and excessive expenditures in maintaining administrative-management personnel; it does not measure up to the tasks of accelerating socio-economic development.

Promulgation of cardinal measures to improve the entire administrative-management system in Uzbekistan is likewise dictated by the situation which has evolved in the economy. The exacerbation of the shortage in water resources as well as fuel-and-energy resources, the continuing high growth rate of the population, and the need to eliminate as quickly as possible a number of disproportions and dislocations in the sectorial development of the national economy require qualitatively new approaches to providing the groundwork for the directions and parameters of growth in public production, along with improvement in its sectorial and territorial structure.

We are confronted in the immediate future with the task of stepping up the average annual growth rate by a factor of 3.5-4, while the volume of the gross agricultural output must be more than doubled. Outstripping paces will be developed by the labor-intensive sectors, especially machine building, whose output must increase by a factor of 6-8, light industry, and the production of

consumer goods, which is slated to triple. This must be accomplished in order to raise the overall level of economic development, make a worthy contribution to the country's integrated national-economic complex, solve urgent social and economic problems, and, above all, increase the population's employment and improve its supply of food products and manufactured goods.

It is impossible to solve such extremely complex problems without radical changes in the administrative system.

The fundamental principles which constitute the foundation of the measures outlined for improving all aspects of administering this republic's national-economic complex comprise universal expansion of the process of democratizing public life, making the transition to predominantly economic management methods, and merging general state interests with the interests of labor collectives and territories.

On a more specific level the Draft General Plan for Administration provides for the following actions:

combining ministries, departments, and other republic-level organs which exercise guidance of homogeneous sectors, particularly those in the non-production sphere, creating new formations of the basic unit on a sectorial or regional basis;

simplifying organizational management structures, converting basically to a two-unit system, redistributing the rights and obligations of management organs, taking into account the strengthening of the fundamental thrust of their activities;

enlarging oblasts and rayons in order to improve the administrative-territorial division of the republic in accordance with the principles of economic districting and the tasks of increasing management efficiency;

focusing activities of the upper-level administrative echelons on the key questions of the sectors' and territories' future development, creating favorable conditions for highly effective work by the basic production unit, based on the principles of full cost accounting and self-financing.

The Draft General Plan for administering the republic has outlined the following steps to be taken:

conversion to a fundamentally new form of administrative organization for the large-scale, republic-level, national-economic complex, allowing us to better combine the sectorial and territorial administrative principles, as well as to eliminate bureaucratic obstacles on the basis of merging administrative organs in homogeneous sectors;

reducing the number of union-republic and republic types of ministries and departments to 16 units.

CREATION OF THE FOLLOWING ORGANS IS PROPOSED:

Uzbek SSR State Committee for Construction—a permanent organ of the Uzbek SSR Council of Ministers, based on the following to be abolished: Uzbek SSR State Committee for Construction Affairs, Uzbek SSR Ministry of Construction, Uzbek SSR Main Administration for Construction in the City of Tashkent, Uzbek SSR Ministry of the Construction Materials Industry, Uzbek SSR State Committee for Water-Resources Construction (with the subsequent transfer of the water-resource types of organizations to the Uzbek SSR State Committee for Land Reclamation and Water-Resource Management, which is to be created), as well as the following to be transferred to this organ: the Main Administration for the Production of Structural Components and Wood Processing under the Uzbek SSR Council of Ministers. It is intended to assign to Uzbek SSR Gosstroy the task of coordinating the activities of construction-and-installation organizations and enterprises of the construction industry operating on this republic's territory, regardless of their departmental jurisdiction;

Uzbek SSR State Committee for Land Reclamation and Water Resources, based on the following to be abolished: Uzbek SSR Ministry of Land Reclamation and Water Resources and the Main Central Asian Administration for Irrigation and State Farm Construction under the USSR Ministry of Land Reclamation and Water Resources. Creation of this committee will allow us to concentrate the forces and funds of the water-resource complex's organizations on solving the urgent problems of raising the technical level of water-distribution and supply systems, on the well-planned implementation of measures to develop and radically redesign irrigated lands, and also on the more effective utilization of this region's water resources;

State Cooperative Association for Construction in the Uzagropromstroy Agroindustrial Complex, based on the Uzbek SSR Gosagroprom [State Agroindustrial Committee] Main Administration for Capital Construction and Renovation and the Uzagropromstroy Association. This will allow us to provide the necessary specialization of the following construction organizations: Uzbek SSR Gosstroy—on industrial and civil construction, Uzagropromstroy—on agricultural construction, and the Uzbek SSR State Committee for Land Reclamation and Water Resources—on water-resource construction. Calculations show that the intended reorganization will facilitate a considerable improvement in the use of existing capacities for construction production;

Uzbek SSR Ministry of Public Education, based on the following to be abolished: Uzbek SSR Ministry of Education, Uzbek SSR Ministry of Higher and Secondary Specialized Education, and the Uzbek SSR State Committee for Vocational and Technical Education;

Uzbek SSR State Committee for Labor and Social Problems, based on the Uzbek SSR State Committee for Labor and Social Problems and the Uzbek SSR Ministry of Social Security, which is to be abolished, with the transfer of some of the latter's functions to the Uzbek SSR Ministry of Health;

Uzbek SSR Ministry of Motor Transport and Highways, based on the following to be abolished: Uzbek SSR Ministry of Motor Transport and the Uzbek SSR Ministry of Highway Construction and Maintenance.

It is also proposed to transform the Uzbek SSR Ministry of the Forestry Industry and the Uzbek SSR Ministry of the Furniture and Wood Processing Industry into production associations, and to transform the Uzbek SSR State Committee for the Fish Industry into a scientific-production association under the USSR Ministry of the Fish Industry.

The Draft General Plan has also provided for the merger of the Uzbek SSR Ministry of Culture with the Uzbek SSR State Committee for Cinematography, as well as a merger of the Uzbek SSR Main Archives Administration under the Uzbek SSR Council of Ministers with the Uzbek SSR Ministry of Justice.

Improvement of administration within the Gosagroprom [State Agroindustrial Committee] will be facilitated by the intended transfer of basic production-and-distribution functions to the oblast and rayon agroindustrial associations, enterprises, organizations, and farms, while retaining for the republic-level organs control over the problems of developing and implementing economic, investment, and scientific and technical policy. As a result of carrying out the envisioned measures, the number of facilities being directly administered by Gosagroprom will be reduced from 1,211 to 80 units. At the same time, in certain rayons of the republic they intend, on the basis of RAPO's [rayon agroindustrial associations] to create new economic formations—agroindustrial combines of the Kuban Combine type—and, based at a number of sovkhozes specializing in the production of fruits and vegetables, to create agro-trade sovkhoz-firms which would be subordinate to appropriate RAPO's. In the very near future the intention is to create 35 agro-firms, agro-combines, and agro-trade associations.

In order to guide the processing sectors of the agroindustrial complex's industry, proposals have been made to form the following production associations: Khlopkoprom, Pishcheprom, Myasomolprom, Ptitseprom, Shelk, and Agrospetsremont.

In all, the General Plan has provided for the creation of 13 new scientific-production associations and 119 production associations.

During the course of working on the Draft General Plan particular attention was accorded to restructuring the territorial administration.

The organs of territorial administration, formed during the period when administrative-command methods of guidance were in effect, were founded on the principle of rigid centralization. In a number of cases a poorly thought-out administrative division retarded the economic development of regions, since it was bound together with an artificial disruption of the water, transport, and power-engineering systems, as well as with optimal economic-management ties. The possibilities for drawing the unemployed population into public production were not always taken into account to the extent necessary.

During the course of making territorial changes there was a failure to take into consideration the unity of the mineral-raw-material base and the availability of processing capacities. This may be seen in the examples of Navoi Oblast, with its rich reserves of mineral resources and a one-sided structure in its processing industry, and Samarkand Oblast, which has a powerful production potential and considerable manpower resources, but whose development and effective use of these factors is held back by its narrow oblast boundaries.

The formation of certain new rayons and cities did not improve but rather frequently exacerbated difficulties in solving the urgent problems of regional economic and social development.

Taking into account the problems posed for us with regard to further deepening specialization, the increasing complexity of regional socioeconomic development, elimination of excessive fractionation in territorial administration, and a reduction of the administrative-management apparatus, a proposal will be made to create the following larger oblasts, whose boundaries would be closer to this republic's objectively evolving economic regionalization:

Bukhara Oblast—based on Bukhara and Kashka-Darya oblasts, Syr-Darya Oblast—based on Syr-Darya and Dzhizhak oblasts, Samarkand Oblast—based on Samarkand and Navoi oblasts, Fergana Oblast—based on Fergana, Andizhan, and Namangan oblasts.

The feasibility of merging the above-mentioned oblasts is conditioned, above all, by their commonly shared production specialization within the framework of the republic-level and all-union division of labor, their common trend of specializing in agricultural production, close ties between their water-resource, transport, and power-engineering systems, the uniformity of the natural-climatic and landform conditions, as well as the interconnectedness of the base of mineral raw-material resources.

For example, the present-day division of the Fergana region into three oblasts comes into conflict with the development of production-economic and transportation interconnections; it hinders the conduct of an integrated structural policy and gives rise to a tendency to turn each oblast into an enclosed economic complex. As of today, there is no unity here in the use of the water-resource system, consisting of the following canals which run through the territory of this region: the Large, Southern, and Northern Fergana Canals, as well as other hydro-engineering structures; the operation of integrated power-engineering and transportation systems is being conducted in a disjointed manner, etc. All of these factors make it difficult to effectively utilize the production-economic and technical potential of Fergana Valley's oblasts.

By its basic economic parameters this region is advancing to first place in the republic. By the production volume of industrial and agricultural output, along with construction-and-installation output, as calculated on a per-capita basis, it will correspond basically to the average republic level.

The prospects for industrial development are connected, in the first place, with the creation of labor-intensive and science-intensive machine-building production lines of all-union importance. The output volume of machine building in the three oblasts will increase by a factor of 6-7 by the year 2000 and will reach 3.7 billion rubles. This task can be successfully carried out only under the conditions of creating a unified program of specialization and cooperation among the facilities to be introduced, the development of their scientific and technical and experimental-design base, as well as training skilled personnel. Implementation of such a program can be effective only on a scale of an integrated oblast.

According to their own indicators, the newly created oblasts will draw close to the level of oblasts in Belorussia, the Ukraine, Kazakhstan, and even certain strong oblasts of the Russian Federation. Such regions will be capable of solving the complex problems to be assigned to this republic for the 13th Five-Year Plan and the long-range future within the framework of the program being worked out for developing the production forces of the republics of Central Asia and Kazakhstan for the period up to the year 2010.

On the lower level of territorial administration it is proposed to enlarge more than 20 rural rayons and to turn part of them over to the jurisdiction of city Soviets of People's Deputies. This would allow us to strengthen their economic potential and eliminate excessive fractionation in administrative-territorial division.

Within the overall system of measures for improving territorial administration, provision has been made for restructuring the functions and structure of the oblast management organs; as a result of this, the number of boards and divisions of the oblast Soviets' ispolkoms will be reduced by more than half.

At the same time, in order to substantially enhance the role and responsibility of the local Soviets of People's Deputies for ensuring this territory's comprehensive economic and social development, strengthening economic management methods, improving coordination of the activity of enterprises and organizations, seven main oblispolkom economic-production boards are being created, along with an analogous subdivision under the Gosplan of the Kara-Kalpak ASSR. Work will be continued on setting up territorial, intersectorial associations in the republic's cities.

Enlarging several oblasts and rayons, as well as integrating farms and enterprises, allow us to create the conditions for accelerating the republic's socioeconomic development and for increasing production efficiency. These measures will also allow us to improve the political atmosphere; they will facilitate the strengthening and development of international friendship among peoples, strengthening of personnel staffs at the oblast and rayon levels, as well as directly in the production subdivisions.

Implementation of the measures provided for by the Draft General Plan for Administering the National Economy has as its goal bringing administration closer to the production line, ensuring a more clearly efficient merging of rights and responsibilities in order to produce end results in the work being done at all levels of managing the economy, rooting out bureaucratism, and creating the foundations for fruitful and purposeful activity on the part of administrative organs.

The major change in management functions and methods is creating the conditions for reducing the number of staff employees required by the state administrative organs, including those in the central machinery of ministries and departments, by at least 50 percent, and in the ispolkom machinery of the oblast-level Soviets of People's Deputies—by 30-35 percent. Moreover, up to 70 percent of the savings made in the wage fund as a result of this reduction is intended to be used for increasing the wages and salaries of staff members employed in the above-indicated organs.

In all, the Draft General Plan being presented provides for the elimination of more than 30 state administrative organs at the republic level, along with a considerable number of organizations at the oblast, rayon, and city levels.

It is proposed that the General Plan for administering this republic's national economy be fully effectuated during the current year and the guidance of the work to fulfill the plan for the remaining years of the 12th

Five-Year Plan will be ensured of having new organizational structures. Thus, we will be able to enter upon the 13th Five-Year Plan with a well-adjusted economic mechanism, based on predominantly economic management methods.

Implementation of the General Plan for Administering the Uzbek SSR's National Economy will become an important factor in accelerating this republic's socioeconomic development, impart a new impulse to the upsurge of its production forces, and will facilitate the development of the masses' creative energy and initiative, along with an increase in their prosperity.

Suggestions and comments should be sent to the following address: Uzbek SSR Council of Ministers, 5 Parade Avenue, Tashkent.

2384

REGIONAL DEVELOPMENT

Turkmen Ministries Reorganize, Cut Personnel to Raise Efficiency

18200124 Ashkhabad TURKMENSKAYA ISKRA in Russian 24 Mar 88 p 1

[Unattributed article: Draft of General Scheme for Administering the TuSSR National Economy]

[Text]**The draft of the general scheme for administering the TuSSR national economy, presented by the TSSR Council of Ministers, has been submitted for the discussion of concerned ministries and departments, enterprises and organizations, labor collectives and all citizens of the republic. Wishes and suggestions pertinent to improving the activities of the republic's administrative organs should be sent to the TuSSR Council of Ministers.**

The editorial board also invites its readers to take part in discussing the draft at the various offices of the newspaper. We hope to hear interesting and constructive suggestions on ways to improve the leadership of our national economic sectors and the administrative structure of local government bodies.

The draft for the general scheme for administering the TuSSR national economy was worked up in compliance with the decisions of the June (1987) CPSU Central Committee Plenum and is based on positions and principles taken from the CPSU Central Committee and USSR Council of Ministers decree "Improving the Work of Republican Administrative Organs".

The administrative structure which has become established thus far is to a great extent a replica of the national structure. The republic, which has a population of 3.5 million people, has 45 ministries and departments and 26 public organizations. Both parallelism and administrative duplication take place, and the processes of expansion of production and social development are disconnected. There is a three- and four-link administrative system operating in some sectors. The division of this administrative area is unjustifiably fragmented. The republic has created 10 new rayons in just the last three five-year plan periods. As a result, the staff of the administrative organs has expanded so excessively it is 1.5-fold greater than the national average indicator.

The draft of the general scheme calls for a restructuring of the work of the republican and local administrative organs on all leadership levels and creates requisites for a transition primarily to a two-link administrative system, which will promote further acceleration of the republic's social and economic growth and an increased contribution on its part to the development of the country's unified national economic complex.

In connection with the introduction of the USSR Law of the State Enterprise (Association), provision has been made for considerably expanding the independence of enterprises and organizations and transferring to them a great many of the functions of the republic's administrative organs. This simplifies the administrative structure, eliminates superfluous links and scales down the administrative staff.

The republic's ministries and departments will concentrate their activities on long-term planning, the scientific and technical support of industry, on implementing an effective investment policy and on expanding the productive and social infrastructure.

The draft of the general scheme for administering the TuSSR national economy provides for:

administering 16 ministries, state committees and departments, reducing their number from 45 to 29 and reducing the number of persons on the central staff by 50 percent, i.e., by 2,200 persons.

changing over primarily to a two-link administrative system and eliminating 20 intermediate organs from the mid-level administrative link;

increasing the level of concentration in the primary link by setting up 45 new production associations, 3 scientific production associations, one planning and construction association and one industrial trade association.

Provision has been made for setting up the following state committees and ministries to provide guidance for our national economic sectors:

The TuSSR State Committee for Industry, based on the abolished TuSSR Ministry of Light Industry and the TuSSR Ministry of Local Industry. The TuSSR State Committee for Industry is charged with coordinating the activities of the ministries, departments, ispolkoms of local Soviets of People's Deputies and union-level enterprises involved in producing consumer goods;

the TuSSR State Construction Committee, based on the abolished TuSSR State Committee for Construction Affairs, the TuSSR Construction Committee and the TuSSR Ministry of Industrial Construction Materials. TuSSR Gosstroy is charged with implementing a unified construction policy;

the TuSSR State Committee for Construction of Water Resources and Industrial-Civil Agroindustrial Complex Projects, based on the abolished TuSSR Ministry of Reclamation and Water Management and Glavkarakumstroy [Main Kara Kum Construction Administration], which has been made part of it, and USSR Minvodkhoz' [Ministry of Land Reclamation and Water Resources] Turkmenselkhozvodoprovod [Turkmen Agricultural Water Supply] Production Association and Turkmenagropromstroy [Turkmen Agroindustrial Construction] Production Association, which is affiliated with TuSSR Gosagroprom [State Agroindustrial Committee]. TuSSR Goskomvodselstroy has been charged with acting as general contractor for construction of the Kara Kum Canal, land reclamation systems, industrial and agricultural projects and projects related to the agroindustrial complex's social sphere;

the TuSSR State Committee for Nature Conservation, based on the abolished TuSSR Ministry of the Forestry Industry, with the nature conservation subdivisions of the TuSSR Ministry of Land Reclamation and Water Resources, the TuSSR State Agroindustrial Committee, the USSR State Committee for Hydrometeorology and Environmental Control, the USSR Ministry of Geology and the USSR Ministry of the Fish Industry transferred to it;

the TuSSR State Committee for Labor and Social Problems, based on the abolished TuSSR State Committee for Labor and the TuSSR Ministry of Social Security;

the TuSSR Ministry of National Education, based on the abolished TuSSR Ministry of Education, the TuSSR Ministry of Higher and Secondary Special Education and the TuSSR State Committee for Vocational and Technical Education;

the TuSSR Ministry of Motor Transport and Highways, based on the abolished TuSSR Ministry of Motor Transport and the TuSSR Ministry of Highway Construction and Maintenance.

It has been proposed that the following ministries and state committees and departments be abolished:

the TuSSR Ministry of Cereal Products, with its functions transferred to the TuSSR State Agroindustrial Committee;

the TuSSR State Committee for the Supply of Petroleum Products, with its functions transferred to the TuSSR State Committee for Material and Technical Supply;

the TuSSR State Comittee for Gas Supply, with its functions transferred to the TuSSR Ministry of Municipal Services;

the TuSSR State Committee on Prices, with its functions transferred to the TuSSR State Planning Committee;

the TuSSR State Committee for Cinematography, with its functions transferred to the TuSSR Ministry of Culture;

the TuSSR Council of Ministers' Main Archives Administration, with its functions transferred to the TuSSR Ministry of Justice;

the TuSSR Council of Ministers' Administration of the Fish Industry, with its functions transferred to the TuSSR State Agroindustrial Committee;

the TuSSR Administration for Foreign Tourism, to be converted into the TuSSR Administration of the USSR State Committee for Foreign Tourism.

The draft scheme calls for improvements in the administration of the republic's agroindustrial complex. In an effort to integrate science and production, plans call for the formation of 12 production and scientific-production associations for fruit and vegetable growing, bee keeping, silkworm breeding, poultry breeding, etc. Administration is being improved in the rayon link, and plans call for the administration of 12 rayon-level agroindustrial associations and the setting up of new types of structural formations targeted at the final result of economic operation and reducing the number of stages in the administration.

For the purpose of concentrating freight and passenger traffic, plans call for the setting up of large-scale motor-transport production associations in the cities of the republic.

Provision has been made for setting up production associations for domestic services, photographic operations, footwear-sewing, drycleaning, clothing dying, and for housing and municipal services.

Particular emphasis was given to the problems associated with improving the administrative area division and the administrative structures of local Soviets of Workers' Deputies.

At the present time within the republic there are 5 oblasts, 16 cities and 44 rural and 3 urban rayons. The administrative staff of the oblast, municipal and rayon ispolkoms numbers over 9,500 persons, whose salaries require allotments of R17 million per year. From 1965 to 1970 the republic had no oblast divisions and had only 34 rayons.

Considering the relatively low volume of production facilities and the small number of occupational specializations to be found in the economies of individual regions and the fact that there are only three to nine kolkhozes in the 13 rural rayons, the draft of the general scheme calls for the abolishment of the Ashkhabad and Krasnovodsk oblasts, the unification of the Ashkhabadskiy and Gyaurskiy, Kizyl-Arvatskiy and Kara Kalinskiy, Kizyl Atrekskiy and Gasan Kulinskiy, Takhta Bazarskiy and Kushkinskiy, Kalininskiy and Telmanskiy, Sakarskiy and Sayatskiy, Khodzhambasskiy and Dostlukskiy, Deynauskiy and Dargan Atinskiy rayons. The Bayram-Aliyskiy Rayon division is to be abolished, the Serakhskiy Rayon is to be transferred from the Ashkhabad Oblast to the Mary Oblast and a new rayon is to be set up in the developed areas of the Khauz-Khan area in the Mary Oblast. This will reduce the number of rural rayons from 44 to 36.

The money saved by reducing the administrative staff will used to build schools, preschools, hospitals, polyclinics, cultural facilities and also to raise the wages of ispolkom staff employees.

In order to raise the level of national economic leadership in the republic's oblasts, provision has been made for the setting up of main planning and economics administrations, which will make it possible to transfer the functions of developing and organizing the fulfilling of integrated plans for economic and social development, of distributing capital investments for the purpose of developing the social sphere throughout the territory and the national economic sectors.

There are plans to reduce the number of employees on the ispolkom administrative staffs by no less than 55 percent overall, and this includes those in the Mary, Tashauz and Chardzhou oblasts by 30 percent.

We plan to create rayons and cities subordinate to the republic in the territory of the abolished Ashkhabad and Krasnovodsk oblasts. In order to increase the role played by local Soviets of People's Deputies under the new system of economic operation, there are plans to set up departments of integrated economic and social development, capital construction and municipal services in the rayons and cities mentioned above, and to consolidate the other structural subdivisions.

The draft of the general scheme calls for 31.8 percent cutbacks in the number of persons employed by public organizations, and cutbacks of 50 percent in those organizations which service the ministries and departments.

In order to continue to improve the organizational structure and improve its operating efficiency, we intend to to cut back on the number of computing centers in the unit which performs jobs for the central staffs of the ministries and departments. Measures are slated for considerably increasing the computer centers' workloads and for changing them over to collective use.

Proposals have also been prepared which are aimed at improving the structure and reducing the number of people on the administrative staffs of organizations of union subordination.

Improvements in the structures of the republic's organs and the division of the territorial area have resulted in plans to reduce the overalladministrative staff by 7,000 persons, or 25.6 percent.

As the draft of the general scheme was being worked up, particular emphasis was placed on finding jobs for the administrative staff employees who had been released. It is assumed that most of them will be used to augment the work forces of enterprises and organizations involved in the area of service work. They will also be used to fill vacant posts.

Vacant buildings formerly used by abolished organs will be used, along with their material and technical base, to find solutions to social problems.

Implementation of the measures called for in the draft of the general scheme will serve to consolidate the primary link in the economy, to provide independence for the enterprises and associations within the framework of the USSR State Enterprise (Association) Law, will make it possible for the upper-level administrative links to change over to economical administrative methods and to focus their efforts on finding solutions to the key problems associated with the comprehensive economic and social development of the republic.

12659

Estonia's Vayno Discusses Shift to Economic Accountability

18200162 [Editorial Report] Tallinn SOVETSKAYA ESTONIYA in Russian on 26 April 1988 carries on pages 1 and 4 a 4,000-word ETA report on the speech given by First Secretary K. G. Vayno at the Eighth Estonian CP CC Plenum titled "On the Tasks of Republic Party Organizations in Fulfilling the Decisions of the February 1988 CPSU CC Plenum." In the course of discussing problems which must be examined, Vayno notes that the idea of shifting the republic to economic accountability [khozrashchet] has received widespread attention. He reports that the Institute of Economics of the republic Academy of Sciences has created a temporary scientific collective on the problem of regional management and that additional research on related topics is underway. "A preliminary version of the conception of republic economic accountability is proposed for receipt in June of this year. These conclusions will be published, and constructive discussion on them has already begun. The final version will be presented by the end of the year to the Estonian Council of Ministers Presidium Commission on Improving Management, Planning and the Economic Mechanism."

Vaino states that more independence is needed to fully develop economic accountability, adding new rights to those already in existance. "I personally consider that all production of consumer goods is strictly a local matter. Can that be true, in the spirit of the times, when Gosagroprom or, let us say, the USSR Ministry of Light Industry continues to rule from the center?"

"In time, decentralization will certainly take place. I am convinced of this. That is why I spoke with M. S. Gorbachev on the necessity of decentralization at the representative meeting of first secretaries in Moscow four days ago. In my understanding, widening the rights of republics in the economic, social and cultural spheres is aside from everything else the background on which healthy national relations are formed."

11772

Estonia's Saul Interviewed on Ministry Changes, Personnel Cuts

18200134a Tallinn SOVETSKAYA ESTONIYA in Russian 16 Mar 88 pp 1-2

[Interview with Bruno Saul, Chairman of the Estonian SSR Council of Ministers]

[Text] Discussion has been revolving around the general plan for management of the republic national economy for several months now. The newspaper RAKHVA KHYAEL asked the chairman of the ESSR Council of Ministers, Bruno Saul, to answer a couple of questions that will undoubtedly interest SOVETSKAYA ESTONIYA readers as well.

[Question] The general plan for management of the ESSR national economy envisions a merging and reshaping of a number of departments and the reorganization of ministries into committees. Who will be working with whom in this? Whose jurisdiction will change? Which departments will be in charge of our republic's economy?

[Answer] First of all I wish to take a quick look at the reasons for developing a new management structure and briefly fill you in on the principles by which we were guided in creating it. The essence of the radical restructuring of the economic mechanism, as was announced at the June (1987) Plenum of the CPSU Central Committee, consists in a changeover to primarily economic methods of management and extensive democratization. The existing management system, whose forms and methods were developed almost a half century ago, stands in sharp contradiction to these principles. The absolutization of the principle of centralism, departmental management, bureaucratism, administrative dictatorship in the management of enterprises, and the economy's poor receptivity to the achievements of science and technology resulting from the effect of the cost mechanism—all this has become a serious impediment on the path to transformations.

The expansion of the rights of the enterprises in keeping with the Law on the State Enterprise that went into effect on 1 January 1988, a mainly two-level system of management, a radical change in the functions of the ministries and departments, and a significant expansion of the sphere of influence of local authorities—these are what guided us in developing the new management structure. Hence the abundance of management agencies. If one takes into account the social organizations as well, Estonia has about 100 republic management agencies, including 43 ministries, committees and departments. This, of course, is too many, which was also discussed at the 7th Plenum of the Central Committee of the Communist Party of Estonia.

Therefore, it was decided to create state committees to manage the most important socioeconomic complexes. For the first time in the republic the production of consumer goods, the supply of fuel and energy resources, transportation, education, culture, environmental protection, trade, and consumer services will be organizationally joined together into a unified management system. Speaking concretely, it is intended to create seven new state committees:

The ESSR State Committee for Industry based on the Ministry of Light Industry, the Ministry of Local Industry, and the Ministry of the Timber, Pulp and Paper, and Wood Processing Industry, which will manage production of consumer goods throughout the entire territory of the republic;

the ESSR State Committee for Fuel and Energy will combine the Main Administration for Gasification and the State Committee for Petroleum Products. It will also be responsible for supplying the consumers with hard coal (shale), briquettes (peat), and firewood;

the ESSR State Committee for Service will unite the Ministry of Consumer Services, the Ministry of Trade, and the Ministry of Housing and Municipal Services, and it will coordinate the implementation of the program for paid services for the population of the republic;

the ESSR State Committee for the Protection of Nature is being created on the basis of the Ministry of the Timber Industry, the water management inspection team and other similar subdivisions under union jurisdiction;

the ESSR State Committee for Culture will unite the Ministry of Culture, the State Committee for Cinematography, and the State Committee for Publishing, Printing and the Book Trade;

the ESSR State Committee for Public Education is being created on the basis of the Ministry of Education, the Ministry of Higher and Secondary Specialized Education, and the State Committee for Vocational and Technical Education;

the ESSR State Committee for Transportation will unite the corresponding subdivisions of the Ministry of Automotive Transportation and the Ministry of Housing and Municipal Services.

Other changes will also be necessary. We will have an overall total of 22 "superfluous" ministries and departments. But reducing the number of departments is not a goal in itself. The main thing is that the new committees represent a principally new type of mainly a coordinating agency for management that is constructed on a functional basis. On the one hand, the enterprises should be given all the rights envisioned by the law, and on the other, the creation of the new agencies will free the republic Council of Ministers of operational management of branches of the national economy and also of the responsibility for resolving minor current issues.

There will also be quantitative and qualitative changes in the committees that are already in operation, Gosagroprom, Gosstroy, Gossnab, and others. At the same time certain ministries will be preserved: foreign affairs, internal affairs, communications, public health, justice, and finance—but with additional functions and a greater degree of responsibility.

[Question] The plan also envisions changes in the structure of the enterprises. There will be a reduction of the number of associations and enterprises, but there will be more scientific-production and state production associations. What more do you have to say about that?

[Answer] We now have more than 2,800 enterprises and institutions. According to the new plan there should be almost 250 fewer of them. We intend to create six state production associations, of which two will be in industry, one in agriculture, and three in the nonproduction sphere. It is necessary to bring science closer to production. The experience of scientific production associations that are in operation (Standard, Mistra, Dezintegrator) is invaluable here. Therefore we consider it correct to send at least half of the workers of branch scientific and planning-technological organizations to the NPO's. It is planned to create six NPO's—in the Gosagroprom, Gosstroy, and in the system of the State Committee for Industry.

We are also thinking about creating a completely new type of association. As trade and industry associations such well-known firms as Marat, Punane Koyt, Sangar, and Linda will be able to satisfy the consumers best. In the Gosstroy we intend to create planning-construction organizations. Here too we are proceeding from the interests of the consumers. Smaller enterprises can look more confidently into the future. Along with cooperative and individual forms of labor, small enterprises should react flexibly to fashion and satisfy demand more fully.

[Question] One of the goals of the new management plan is to reduce the administrative staff. By how much will it be cut?

[Answer] Today 2.14 percent of the people employed in public production work in the management apparatus. After the reorganization this indicator will be reduced to 1.68 percent. The overall total of people to be cut will be about 4,000 of the 15,800 who today are working in government institutions, ministries, departments, ispolkoms, public organizations, and also in computer centers and all kinds of design bureaus that provide services for the ministries. And the greatest cut—more precisely, by half—will take place in the central staffs of the ministries and departments. Of course, this does not mean that in all ministries every second person will automatically be fired. The approach will be strictly individual. The extent to which the existing staff corresponds to its future functions and also the prospects of the departments will also be taken into account. For example, the new ESSR State Committee for Service will employ only one-third of those who are now employed in the ministries it will join together. And nobody will be released in the Ministry of Foreign Affairs while in the State Committee for Protection of Nature two-thirds of the workers in the current system will remain.

Since one of the important tasks of the new plan is to improve territorial management, the number of people working in Soviet agencies will be reduced by less than in the departments—namely by 30 percent.

The reduction of the management apparatus will give us an annual savings of about 9 million rubles.

[Question] What opportunities to work in their specialty will be granted to those who will be forced to leave the positions they hold?

[Answer] This is a very delicate issue. On the one hand, today the shortage of work force is so significant that no serious problems should arise with labor placement. To confirm this I shall give the figures for last year's wage reform when a reduction of work places by more than 12,000 did not produce any appreciable social tension. Moreover, the labor placement of the released workers reduces unjustified migration. It is also necessary to take into account the fact that the majority of the released workers are good specialists and both the production and nonproduction spheres of the national economy are interested in them. This is one side of the matter, the economic side. But we undoubtedly must take into account also another side—the human side. Who wants to end up a superfluous, unnecessary worker, the more so if he loses any kind of power?

There is only one path if one wants to take the psychological aspect into account. Relying on the results of the certification, in the ministries, departments, and organizations it is necessary to talk individually with each person who is cut, keeping everything out in the open. The person who has been cut must be fully informed of

why his work functions are being abolished, what his possibilities are for finding a job or acquiring new qualifications, and what benefits or social guarantees he has a right to.

I wish to add that on 2 February the Central Committee of the Communist Party of Estonia, the Council of Ministers and the republic trade union council adopted a joint decree which considers in detail the issues of employment of the population, efficient labor placement, and social guarantees for the workers. The decree mentions individually those who are to be cut as a result of reorganization of the management system.

[Question] What are the possibilities of intradepartmental redistribution of funds in connection with the forthcoming savings on the wage fund?

[Answer] As a rule, 70 percent of the savings on the wage fund (with the exception of committees that are created) will remain at the disposal of the department. There is, however, one nice exception: the ispolkoms are permitted to keep all of the sum they save. This will make it possible to increase the average earnings of ispolkom workers from 147 to 200 rubles and will create favorable conditions for staffing the ispolkoms with qualified workers.

[Question] The reduction of the number of personnel in management is a step toward the development of territorial administration, that is, a reduction of departmental red tape. What will be the relations between the new institutions and the local authorities and city and rayon ispolkoms?

[Answer] I hope that the relations will be marked by mutual understanding and cooperation. There is justification for optimism. Departments of the nonproduction sphere, for example, will transfer a significant percentage of their work functions to local soviets, which will make it possible to solve problems of education, culture, and service comprehensively in the cities and rayons.

The functions of the client for construction and capital repair of facilities of the social sphere are also being transferred to local authorities. The quotas for capital construction and construction and installation work are allotted without a breakdown for the various departments. The supply of food and consumer goods will increasingly depend on local authorities.

In a word, in the new management structure city and rayon ispolkoms are called upon to perform the function of head coordinators of the economic and social development of their territories, primarily implementation of the food and housing programs and development of the sphere of services.

With the expansion of the rights and responsibilities of the ispolkoms, their work potential also increases. It is intended to radically improve the structure of the ispolkoms. Subdivisions will be created in them which are responsible for comprehensive economic and social development of the regions, distribution of labor resources, and protection of nature. Staff positions of lead and head specialists will be introduced. All this taken together will increase the effectiveness of the work of local authorities. Here it is appropriate to recall the tasks of the local soviets and their ispolkoms that ensue from the decision of the Presidium of the USSR Supreme Soviet of 2 March of this year which was adopted with respect to the report of the Presidium of the ESSR Supreme Soviet.

[Question] The new structure for management of the ESSR national economy will be essentially different from the union structure. The experience of the Gosagroprom and the Gosstroy shows that this creates certain difficulties in interrelations with union departments. Has a strategy or a concept of behavior in this situation been developed? Possible the new management plan has a unit that handles these relations?

[Answer] Indeed, many difficulties arose when we created the Gosagroprom. But that was a different time. Subsequently, during the creation of the ESSR Gosstroy everything was much simpler. This year all enterprises of the construction materials industry fulfilled their planning assignments for 2 months. The volume of product output increased on the whole by 10 percent, and cement production increased by one-third. Until quite recently we could only dream about such a level. And on the whole for construction the picture has cleared up appreciably and the future can be seen more clearly.

The creation of a special unit for interrelations between republic and union departments is not envisioned although the corresponding subdivisions exist within the committees. If the departments cannot handle this the Gosplan or Council of Ministers will have to intervene. Our concept amounts to one thing: more issues are to be resolved locally.

The new economic mechanism, naturally, presupposes a considerable expansion of the rights of the union republics in planning, financial activity, the social and cultural sphere, the organization of labor and wages, and other areas of life. It is also clear that these rights must be earned. Departmental abuse in our country is still very strong, but changes are taking place here too.

When developing the new plan we analyzed in depth which rights and, of course, which responsibilities should be transferred from the union to the republic level. In January of this year we sent concrete proposals (and we had gathered so many of them that they could barely be squeezed onto 19 typed pages) to the Commission of the USSR Council of Ministers for Management, Planning, and the Economic Mechanism. They are not being considered. There is every reason to hope for a positive resolution for the majority of them.

[Question] Both the departments and the enterprises should reduce their management staffs. This will inevitably cause difficulties with reporting and statistics since the ones to be cut are mainly those who engage in this work. Does the new management structure envision any kind of redistribution of tasks, duties, and rights among the enterprises, the Gosplan, the State Committee for Statistics, and the Gossnab?

[Answer] First of all about the statistical reporting. At the end of last year or, more precisely, on 29 December there was a meeting of the Commission of the ESSR Council of Ministers for Improving Administration, Planning, and the Management Mechanism at which they considered the question of regulating and reducing statistical reporting. It was noted that in 1987 the ESSR State Committee for Statistics, based on the new management conditions, revised all the reporting they had established. As a result, the number of report indicators was reduced by a factor of 4 as compared to the number as of 1 January 1986. And this policy is continuing. One might say as a joke that the statisticians have nothing left to do but to solve little problems concerning reduction.

We considered the question of the redistribution of the tasks, rights, and responsibilities of the leading economic departments, ministries, and other central institutions back in August of last year. It was at that time that the Central Committee of the Communist Party of Estonia and the ESSR Council of Ministers adopted joint decrees for improving the activity of management agencies as a whole and also individually for the Gosplan, the Gossnab, the Committee for Labor and Social Problems, the Ministry of Finance, the banks, the State Committee for Prices and so on. Relying on these decrees, we also developed a new management structure. Our work is continuing.

[Question] A considerable proportion of the Estonian national economy is comprised of enterprises of union jurisdiction—electronics, electrical equipment, instrument making, machine building—which are distributed among many departments. Why does the general plan not have committees for machine building, instrument making, and the electronics industry which would provide the work structure for, for example, the corresponding scientific and technical departments, which include the scientific potential of the enterprises, VUZ's and the ESSR Academy of Sciences? The future of chemical enterprises is not clear either.

[Answer] In the first place, this issue was resolved back at the June Plenum of the CPSU Central Committee, where it was deemed correct to leave enterprises of heavy industry and the defense industry under the jurisdiction of union agencies.

In the second place, having weighted all the pros and cons, we arrived at the opinion that it was not expedient to create a committee for machine building, instrument making, and the electronics industry in the ESSR. Being under union jurisdiction gives these enterprises better conditions for accelerating scientific and technical progress, improving product quality, and increasing labor productivity. But it is extremely important for us to cooperate more closely with the corresponding union ministries so as to bring the technical reequipment of these enterprises to completion and provide for the most rapid renewal of fixed capital and so forth.

It should be added that the interests and the sphere of activity of the ESSR State Committee for Industry also affect the plants under union jurisdiction. In conjunction with local authorities, the committee will have to coordinate issues of social development of the union plants, supply, cultural and domestic service for the population, and the utilization of labor resources and local raw material. The republic will also be responsible for questions of land use and observance of the requirements of the Law on the Protection of Nature by plants under union jurisdiction.

And another thing: products of enterprises under union jurisdiction in monetary terms comprise approximately 30 percent of the overall volume of industrial production. We submitted a proposal to transfer to republic jurisdiction those enterprises under union jurisdiction that produce consumer goods, such as the Tallinn jewelry plant, Estoplast and Pykhyala, and the Pyarnu machine building plant.

As concerns chemical enterprises, Estonfosforit will not change its jurisdiction. On 1 February of this year the republic government gave its consent to include the Slantsekhim Production Association, the Kiviyli chemical plant, and the scientific research institutes of shales that are located in Kokhtla-Yarve in the state production association Slantseprom, which is being created under the USSR Ministry of the Petrochemical Industry. The new association will be located in Kokhtla-Yarve.

[Question] When will the new management plan be realized?

[Answer] The preparatory work is basically completed. Not all the union ministries agreed with our proposals. In order to prevent obstacles from arising during the course of the realization of the new plan, the CPSU Central Committee and the USSR Council of Ministers will adopt the corresponding decree. In principle it has already been developed. Everything that has been earmarked should be carried out during this year. This is not a campaign but a changeover to a new structure that will be carried out as the departments are ready for it.

11772

HOUSING, PERSONAL SERVICES

Legal Expert Responds to Queries on Housing Distribution

18270043 Moscow IZVESTIYA in Russian
17 Mar 88 p 4

[V. A. Bogorad, candidate of jurisprudence, answers readers' questions; first four paragraphs are IZVESTIYA introduction]

[Text] The USSR "Law on a State Enterprise (Association)" went into effect on 1 January 1988; it assigns new work collective social rights, including respecting the construction and distribution of housing.

A multitude of questions have piled up here — and not by accident since the principle of social justice is becoming more deeply and broadly established in our life. This "semi-closed" area of an enterprise's activity is attracting particularly serious attention. It is not only the fact that more than half of the state housing fund in our country is related to the category of departmental. It is also the fact that it is here, in an area that is difficult for public control to access, that abuses, arbitrariness and violations of a citizen's housing rights most frequently occur.

What is departmental housing space? What is the procedure for using it? What do we have a right to demand here?

V. A. Bogorad, candidate of jurisprudence, answers readers' questions.

[Question] "Many are now writing about the fact that enterprises will have to transfer their housing to ispolkoms. You see, however, ispolkoms provide quarters indiscriminately — to hard workers and to slackers. One only has to stand in line! Is this not really wage-levelling? What do the discussions about the independence of an enterprise, self-sufficiency [samookupayemost] and self-financing mean then?"

V. Skudnev, Volgograd

[Answer] As far as I can understand, you are disturbed by whether an enterprise will be able on its own to dispose of its housing that has been constructed using its own resources.

Undoubtedly, it will be able to do so.

Indeed, the Principles of Housing Legislation and Housing Codes of the union republics talk about the gradual transfer of departmental housing in cities and settlements to the jurisdiction of local councils. Moreover, they recognize its completion as being necessary no later than 1993. However, we are talking about consolidating separate housing and communal facilities in the hands of a single master and raising the material and technical level of his capabilities.

The assets, which an enterprise has invested in building housing, are not at all losing their singleness of purpose. You see, the enterprises are transferring to the ispolkoms that housing which their own workers already occupy. In the future, those apartments that are vacated will be occupied primarily by workers in those same enterprises. This rule also affects apartments that have been vacated in houses constructed using enterprise assets as a shared percentage. In other words, enterprises enjoy so-called preferential rights to repeated use of the apartments in all cases. They themselves decide which of their people on the waiting list will be offered the housing that has been vacated — the same way as if the housing was on their balance sheet. This procedure for assigning apartments is being used regardless of the time of transfer or the completion of the construction of the housing.

What is especially important is the fact that the court recognizes the warrant, issued by an ispolkom in violation of this procedure, as invalid in accordance with a suit by the interested enterprise.

[Question] "Previously, only those who needed housing and who had no more than five square meters per person stood in line at our enterprise. Now, they have devised some kind of preferential criteria for those who are closer to the leadership, such as encouragement for good work. Is this really stipulated?"

V Kudryavtsev, Moscow Oblast

[Answer] First, about the situation that you anonymously link with those "who are closer to the leadership". Speaking frankly, this is not a question for a lawyer: here, it is only necessary to display high principles and to look into everything in your labor collective yourself — especially since rights for public control have been granted to the collective.

It is necessary to make the question about "some kind of privileges" concrete. For example, the 21 April 1986 USSR Supreme Soviet Presidium ukase introduced two important privileges when providing housing at the work place; they concern innovators and progressive production workers who have achieved high indicators in work and who actively participate in public life. First, it is indeed possible to provide preferential grounds for recognizing their need for housing; second, housing is assigned in immediate order. However, one must keep in mind that to employ the above-mentioned privileges, a work collective must stipulate them in the collective contract in advance.

A new and even more radical measure for overcoming levelling in the distribution of housing appeared when the USSR Law on a State Enterprise (Association) went

into effect. Now, enterprise administrations and trade union committees can assign apartments out of turn to highly qualified specialists and other workers — considering their work contribution.

However, one should not fail to point out that one's position on the waiting list at the work site can be shifted to a later time frame — for a malicious violation of work discipline, drunkenness, hooliganism, and embezzlement of state and public property.

[Question] "My mother is on the waiting list for quarters at the ispolkom, and my husband — at work. It seems that matters are progressing more rapidly with him; yes, and the apartments in their housing are a little bit better. Some are confused — the quarters will be departmental. The administration where he works has told my husband that, if he is discharged, they will take back the quarters. Is this servitude for life? If this is so, then perhaps it would be better to wait for one's turn to come up in the ispolkom?"

A Bondar, Kharkov

[Answer] A familiar apprehension. It is based on a false, although widespread, belief that the procedure for using apartments is some kind of special departmental one in departmental housing. Unfortunately, enterprise directors often stir up these notions — especially those who are in the habit of "struggling" for personnel stability aided by state investments in housing construction.

Moreover, the word "departmental" by itself does not mean anything else other than that a house belongs to an enterprise and not to the local council. Speaking to the point, in both cases, only the ispolkom issues a citizen (as they say among the people — the future apartment tenant) a warrant, whose grounds include a contract for renting housing. Concerning the general norms of housing legislation, enterprises stand in line and distribute housing.

The tenants of apartments in enterprise housing (except those specially reserved about which we will talk later) have the same housing rights that tenants in local council housing have. This also applies to the guarantees against eviction. In particular, it is impossible to evict tenants from departmental housing on the grounds that the labor relationship with the enterprise owning the housing has ceased even if one is offered other housing during this. In compliance with the general procedure, tenants in departmental housing have the right to exchange, partition, reserve, or keep housing in the event of a temporary absence; lodge other citizens; etc. If a separate room is freed in departmental apartments, it must first of all be transferred to the citizens living in those apartments who need better housing conditions. When doing this, it is not important whether the one needing it works or does not work in the enterprise to which the housing belongs.

[Question] "I have lived in departmental housing, one can say, since birth — almost 30 years. However, recently I wanted to exchange my quarters in order to accomodate my mother-in-law. I went to the deputy director and all of a sudden — a refusal. I took it to court and I already know that it will be rejected: Your enterprise, they say, is included on some lists. I asked that they show me these lists. The judge smiles: I do not have them, they are not published. Supposedly, a representative of the enterprise had brought to the court an extract from some decree or other which mentioned this. A strange affair: A decree directly affects my housing rights but I am not able to read it anywhere. Can such a decree exist?"

Yu. Izotov, Sverdlovsk

Honestly speaking, it is difficult to believe the author of this letter that he does not at all know under what rights he has enjoyed the apartment all of his life. However, the disputed situation, strange as it may seem, is quite real. The fact is that special departmental housing exists, in which the procedure for using housing indeed differs in a substantial way.

Workers and employees, who have ended their labor relations with the enterprise that has granted them housing, can be evicted from housing in these houses. This move is permitted if a worker is released for one of three reasons: a) at his own desires without any valid reasons; b) for violating labor discipline; c) for committing a crime.

Let us point out that one, who is released upon his own desires, can be evicted only when he refuses to return to the enterprise; the members of his family are also subject to eviction along with him. However, if one of the family members continues to work at the enterprise, it is forbidden to evict the family.

It is necessary to point out in particular that eviction occurs only through legal procedures and only with the offering of other housing. True, it may be smaller than the one occupied and have fewer amenities, but it must satisfy requirements preventing the "migrant" from declaring that he needs better housing, satisfy prescribed sanitary and technical standards, and be within the boundaries of the population center.

An important item: the housing offered is not some abstract one but a completely specific premises; the enterprise must indicate this in its statement to the court, and the court — in its eviction decision.

Now — the conflict essentially. Judge for yourselves: If a tenant can be evicted on the grounds, about which we have just spoken, then he naturally does not have a right to exchange this housing; here, it is also impossible to demand partition of the housing.

The rules, of course, are strict. However, they apply only to the departmental housing fund of individual enterprises forming certain branches in the national economy, which at one time were recognized as the most important ones (in particular, power stations, gas processing plants, etc.). The USSR Council of Ministers and the union republic councils of ministers approve the lists, and the lists include decrees adopted over the course of many years relating to this or that department. An extract from such a decree evidently was submitted to the court and it should be a part of the legal case. The defendant has a right to familiarize himself with it just as with other material. In general, lists are really not being published.

[Question] "The Constitution talks about the right to housing. How about official housing? You see, if you are released, they evict you and will not even give you another apartment. You see, this is not an official dacha, without which one can manage ...."

N. Gorbatov, Kursk Oblast.

[Answer] First of all, there is no contradiction with the Constitution here. Official housing is also housing. It is another matter that it also has a specific purpose — for lodging only those citizens who must live at or close to their work place based on the nature of their work. Speaking to the point, these apartments can be allotted not only in departmental housing but also in the housing of local councils, housing construction cooperatives, kolkhozes, etc.

A decision of the rayispolkom includes housing in official housing. It can be offered only to those categories of workers that are indicated in legislation, for example, to workers in the housing facility (yard-keepers, technician inspectors, furnacemen-stokers, etc.), rail transport workers directly connected with train movements, postmen, and others. Unfortunately, a single list of these workers has still not been published.

Official housing is assigned only in accordance with a decision of the administration of that organization under whose authority it is. The ispolkom issues a special form of warrant: The rental agreement for the housing is concluded only for the time that the tenant is working and in connection with which work he is assigned official housing. In this case, of course, residence is linked with a certain limitation on general housing rights. For example, the residence is not subject to reservation, exchange and partition and it cannot be sublet. When the tenant leaves, it is not kept for his family members. The ceasing of labor relations with the enterprise (or membership in the kolkhoz) involves eviction without being offered other housing.

In this regard, however, it is important to know that an extensive list of cases exists where eviction is permitted only with the mandatory offering of other housing. In particular, this affects retirees and the disabled; people who have worked for no less than 10 years at the enterprise; single people who have minor children living with them; family members of a worker who has died; people released in connection with the elimination of the enterprise or a reduction in force, etc.

Eviction from official quarters occurs only in a legal way. In this regard, courts reject a suit if one of the family members works and continues to work at the same enterprise and can be offered the same official housing based on the nature of his work.

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PERSONAL INCOMES, SAVINGS

Comparative Analysis of Family Budget Allowances

18270041 Moscow SOTSIALISTICHESKIY TRUD in Russian No 2, Feb 88 pp 10-16 PERSONAL INCOME, SAVINGS

[Article by D. Dumnov and Candidate of Economic Sciences I. Dmitrichev: "Family Budget Statistics"]

[Text] The attained level of workers' well-being and the scale of new tasks in this area bring about heightened interest in an all-around study of information on the material and cultural standard of living of the country's population, including statistical information on family income and expenditure. Budget statistics gives important data on the standard of living of various social and occupational population groups. Its data characterize the level of income and expenditure, of the consumption of food products and nonfoodstuffs, and of services for cultural and domestic purposes, housing conditions, the family composition, and the employment of family members.

A sample survey of family budgets organized on V. I. Lenin's initiative has been conducted in our country from the first years of Soviet rule. Its materials are used by the government to develop and implement purposeful measures and programs for a further rise in the level of the people's well-being. Specialists rely on the data obtained from family budgets in various economic calculations and during the preparation of balances of the population's monetary income and expenditure, the balance of labor resources, the balance of agricultural products, and so forth. Until recently family budget statistics was often the only source of social and economic information on the population's public opinion of matters concerning cultural and domestic services, the quality of consumer goods, and the organization of leisure time, as well as many other matters. The value of the survey of family budgets is also determined by the fact that its data characterize the importance of various sources in the formation of family income and show the structure of expenditure and consumption, the change in this structure depending on the amount of income, family composition and size, price level, and a number of other factors. The program for budget surveys includes

detailed data on the private subsidiary plot, housing conditions, availability of articles for cultural and domestic purposes, and the time budget, as well as other data.

The survey of family budgets in our country, which is monographic in its nature, is the only one of its kind. The method of instantaneous observations is used most often for such surveys in other countries.

In our country the survey of family budgets is conducted on a voluntary basis. Until recently it encompassed 62,000 families. As of 1 January 1988 the number of surveyed families will increase to 90,000. The budgets of the same families are recorded monthly throughout the year. Many families have served as the object of observation during a number of years continuously, which makes it possible to study the nature of changes occurring in their budgets.

Especially assigned (statistical) workers are engaged in this work. They prepare budgets based on the questioning of all family members about their income and expenditure. For this the statistician visits the family no less than twice a month and uses the income and expenditure records kept by families, that is, wages, monetary receipts for work on the kolkhoz, pensions received by family members, grants, various allowances, and receipt of foods products from various sources, as well as monetary expenditure on the purchase of food products, clothing, footwear, goods for cultural-domestic and household purposes, payment for services, and so forth.

The aggregate family budget is the basic indicator used in family budget statistics. It represents the sum of monetary and physical (in a monetary evaluation) income from state and cooperative enterprises and organizations, kolkhozes, and the private subsidiary plot, as well as of payments and benefits received from public consumption funds. The latter include expenditures on free education and improvement of skills, on free medical aid, on the payment of pensions, allowances, and grants to students, and on free and preferential passes to sanatoria and rest homes, state expenditures on the maintenance of available housing in the part not covered by the low rent, and expenditures on the payment for workers' annual leaves. Table 1 presents data on changes in the structure of income and expenditure of a worker's and an employee's family.

Table 1. Structure of Income and Expenditure of a Worker's and an Employee's Family in the USSR

(in percent)

	1970	1980	1985	1986
Aggregate family income	100	100	100	100
Including:				
wages of family members	70.1	69.1	67.3	67.1
pensions, grants, allowances, and other payments and benefits from public consumption funds (including free education, treatment, and so forth)	20.9	21.9	23.2	22.9
income from the private subsidiary plot	3.8	3.0	2.8	3.0
income from other sources (receipts from relatives and for work for individual citizens, alimony, and so forth)	5.2	6.0	6.7	7.0
Use of aggregate income	100	100	100	100
Including:				
for food	34.6	30.8	28.6	28.3
for purchase:				
of fabrics, clothing, and footwear	15.4	15.9	15.4	15.0
of furniture, cultural and domestic articles (including passengers cars, motorcycles, bicycles, and so forth)	5.8	7.1	7.4	8.0
of building materials	0.5	0.5	0.6	0.6
of fuel	0.4	0.3	0.2	0.2
of alcoholic beverages	3.2	3.1	2.6	2.2
for social-cultural and domestic services	22.7	22.9	23.5	23.2
including:				
education, treatment, and other free services at the expense of public consumption funds	13.6	14.1	15.1	14.8
rent and payment for municipal services and maintenance of private homes	2.5	2.6	2.6	2.5
accumulations (increase in ready cash and in savings bank deposits and value of weight gain in livestock and poultry, of increase in products of the private subsidiary plot, and so forth)	3.9	4.8	6.6	7.3
taxes, dues, and payments	7.1	7.8	8.0	8.1
other expenditures	6.4	6.8	7.1	7.1

It is characteristic that during that period in the income structure the share of wages of family members decreased, while the share of pensions, grants, allowances, and other payments and benefits from public consumption funds increased. In the expenditure structure outlays on food decreased and the share of expenditures on the purchase of fabrics, clothing, and footwear, as well as on rent, remained virtually stable, but on furniture, cultural and domestic articles (including passenger cars, motorcycles, bicycles, and so forth) increased. The anniversary statistical yearbook "Narodnoye khozyaystvo SSSR za 70 let" [USSR

National Economy in 70 Years] also cites data on the dynamics concerning the structure of income and expenditure of an industrial worker's family and of a kolkhoz member's family beginning in 1940. They characterize even more significant shifts in the structure of both income and expenditure. In particular, from 1940 through 1986 the share of expenditures on food in the aggregate income of a worker's family decreased from 53 to 27.9 percent, but on the purchase of fabrics, clothing, footwear, furniture, and articles for cultural and domestic purposes increased from 12.6 to 22.2 percent. During the same period in families of kolkhoz members the share of expenditures on food decreased from 67.3 to 32.3 percent. On the purchase of fabrics, clothing, and footwear it increased from 10.9 to 15.3 percent and of furniture and articles for cultural and domestic purposes, from 1.1 to 7.4 percent.

The structure of presently used indicators of family budget statistics was formed a long time ago. It has its own traditions. This makes it possible to draw interesting comparisons over many decades.

The first surveys of family budgets in Russia date from the end of the 19th and the beginning of the 20th century. They were conducted in an uncoordinated manner only in several regions according to various programs and with varying methodology. Budgets of textile industry workers's families in the city of Petersburg, the city of Noginsk in Moscow Oblast, and the city of Furmanov in Ivanovo Oblast and of peasants's families in Voronezh, Vologda, Kirov, and Kharkov oblasts were surveyed in 1908-1911.

A special place among prerevolutionary investigations of family budgets belongs to the survey of petroleum industry workers in the city of Baku. It was undertaken by the Commission on Problems of Industrial Hygiene at the Society of Physicians in the city of Baku. Materials of the investigation were collected, worked out, and published under A. M. Stopani's guidance in the work "Neftepromyshlennyy rabochiy i yego byudzhet" [Petroleum Industry Worker and His Budget]. It was one of the first investigations of this kind and in the method of questioning, thinking out, and detailing of elaboration it was at the level of the best works of its time not only in Russian, but also foreign, literature.

Discussing the difficulties during the taking of family budget surveys at that time, it is necessary to note primarily the population's low cultural level. The Russian worker, not to mention the peasant, usually did not keep any records for himself and to make him, for the sake of statistics, manage his household bookkeeping regularly day after day was a complete utopia. It is clear that the quality of the investigation largely depended on the statisticians who made the surveys.

The selection of budgets for surveys was made according to basic typical criteria. At the same time, researchers used mass data on quantitative ratios of workers according to various industries, occupations, nationalities, and family sizes. Out of the 160 petroleum extracting enterprises in the region of Baku at the end of 1909 the budgets of workers at 104 enterprises of various types and sizes, which gave 94 percent of the total local petroleum production, were selected. A total of 5 or 6 percent of all the workers were selected at every industrial enterprise and slightly more, at large enterprises. The elaboration of petroleum industry workers' budgets in Baky was based on the following criteria: existence or absence of a family, nationality (8 groups), and the amount of annual income (17 groups).

It should be noted that many scientific principles, on the basis of which the survey of petroleum industry workers in Baku was conducted, have retained their significance to this day. They include primarily the selection of budgets typical for surveys, collection of materials by the registration, not questionnaire, method, extensive use of mass statistical data, and obligatory nature of balancing the income and expenditure parts of the budget.

The survey program was rich and diverse and included 80 issues (concerning the population's migration, existence of land allotment in a village, income, items of expenditures, unemployment, use of leaves, and so forth).

The region of Baku of that time was almost the only corner of Europe, where nations and nationalities so diverse in their way of life and proletarian consciousness were mixed. Russians predominated among petroleum industry workers. Armenians, Georgians, Tatars, Persians, and so forth were also there. It was also important to investigate the national composition, because occupations were distributed depending on nationality.

The budgets of 26 percent of the families and 74 percent of the single people, among whom one-half were married (their families remained in the homeland), were included in the survey. The basic wages of surveyed petroleum industry workers were at the level of 330 rubles annually (28 rubles per month) and completely coincided with mass data. This part of the wages made up about three-fourths of all the earnings. The remaining one-fourth accounted for all kinds of bonuses, payments for overtime, various kinds of "allowances," and so forth. It should be noted that the earnings of a petroleum industry worker were substantially higher than those of a worker in Moscow and Petersburg.

The investigation recorded a comparatively small number of unemployed—about 1 percent. On the average, however, they did not work 6.5 months in a year. Approximately 6 percent of the employed petroleum industry workers changed their jobs annually. More than one-half of them were forced to leave on account of the staff cut, shutdown of plants, participation in strikes, and clashes with the administration. Petroleum industry workers, mainly Russians, were often forced to enter into a conflict with the administration owing to the most difficult working conditions. In oil fields one had to work

in petroleum and dirt. Hence workers' numerous complaints about eye and leg diseases. Some of them were disabled. And this despite the fact that the average age of a petroleum industry worker was not old (about 30) and only 7 percent were over the age of 40.

The average size of a petroleum industry worker's family was four people: a man-worker, his wife, and two children.

More than one-half of the petroleum industry workers were completely illiterate. Only one-third of their total number could read and write (they were considered semi-illiterate). Education in schools was available to less than one-half of the workers' children.

Four-fifths of the petroleum industry workers consisted of representatives of low-skill and totally unskilled labor, because work requiring strength and health to a greater degree than experience and know-how predominated in production.

Expenditures on food (45 percent) were the basic items of expenditures of a petroleum industry worker's family. The purchase of grain products accounted for more than one-third of these expenditures. Only 15 percent of the products were purchased with cash and the rest, with a record in a notebook. The family of a petroleum industry worker was forced to spend one-fifth of its budget on rent and on the purchase of fuel and lighting materials. A total of 17 percent were spent on the purchase of clothing, footwear, furniture, dishes, and so forth. Expenditures on cultural and educational purposes were minimal. Institutions for sensible entertainment were virtually absent.

Now Baku—Azerbaijan's industrial and cultural center—has 1.7 million residents. Whereas before the revolution the economy of that region was of a one-sided nature, now modern industry and agriculture are developing in an integrated manner. The budgets of 1,150 families of workers, employees, and kolkhoz members, including more than 100 families of petroleum industry workers in Baku (the average size of a petroleum industry worker's family is 2.8 people), are constantly surveyed in Azerbaijan at present. Their housing conditions have improved immeasurably. More than 85 percent of the families living in state and public housing have individual apartments.

The living and working standards of oil field and other petroleum industry enterprise workers have changed fundamentally during the years of Soviet rule. Owing to the progress of science and technology, new occupations requiring special training have appeared here. The average monthly earnings of a petroleum industry worker in this region are more than 200 rubles. His wages and those of his family members account for 62 percent of all the income. The family receives about one-third of the income in the form of pensions, grants, various allowances, and so forth. This includes the cost of education and treatment provided free of charge by the state.

According to 1986 data, the family of a petroleum industry worker used a little more than one-third of its expenditures on the purchase of food products. On the average, it purchased fabrics worth 78 rubles, clothing, 294 rubles, footwear, 136 rubles, furniture and household articles, 221 rubles, and cultural goods, 74 rubles. A total of 456 rubles were paid for services for cultural and domestic purposes, including 121 rubles, for housing and municipal services. The savings bank deposits of a petroleum industry worker's family increased by 113 rubles annually.

We have dwelled in such detail on the survey of budgets of petroleum industry workers' families in Baku, because before the revolution it was the most significant event in the area of study of family budgets. This makes it possible to draw comparisons and contrasts.

Statistical data on other regions, including the region of the former Glukhov Textile Mill, are also accumulated from the prerevolutionary period. There in 1909 I. M. Shaposhnikov became the organizer of surveys of textile industry workers' families. He worked as a physician at that factory for 8 years. This enabled him to know well every surveyed family and its way of life, which facilitated his work to a significant degree and gave him the right to questions that could not be asked under other conditions.

The low level of culture and illiteracy made the selection of typical families for the survey impossible. Only the families, from whom it was possible to receive answers to the raised questions, were taken. The earnings of textile mill workers were not big: of men, 19 rubles per month and of women, 12 rubles. As I. M. Shaposhnikov wrote, virtually the entire expenditure part of the working budget was spent "on the maintenance of physical existence" (98 percent of the budget). This was the level corresponding to what was observed in Western European countries at the end of the 18th and the beginning of the 19th century. However, at the beginning of the 20th century a working family spent "on the maintenance of physicial existence" a little more than 70 percent of its budget. Hence it is evident that the standard of living of workers in tsarist Russia was much lower than that of their brethren in class from Western Europe.

Food constituted the main item of expenditure of a worker's family at the Glukhov Textile Mill—57 percent. A total of 15 percent of the budget was spent on rent and on the payment for heating and lighting, and 10 percent, on the purchase of clothing, underwear, and footwear. However, the workers' diet was noted for extreme sparseness and monotony. In its caloricity it was

obviously insufficient for normal existence. In connection with this I. M. Shaposhnikov wrote the following: "We will find many families, where meat is not bought at all, or is bought only for Easter."

The expenditure of most families, primarily those with many children, exceeded their income. These workers could not get rid of debts for years. Researchers believed that only 3 out of the 240 surveyed families could be considered to be in a state of complete well-being (with bigger wages and some supplementary income).

The Glukhov Cotton Combine imeni Lenin in the city of Noginsk in Moscow Oblast is now one of the largest enterprises of this type in the world. About 15,000 people work at the combine. As before, the statistics of working families' budgets is kept here. In 1986 the average monthly wages of surveyed workers totaled 193 rubles. Last year the average per-capita aggregate family income (with due regard for the cost of education, treatment, and so forth provided free of charge by the state) was 2,100 rubles, or 175 rubles per month, which is much higher than the average level in the country. Wages account for two-thirds of all the family income, pensions, grants, and various allowances and subsidies, including receipts, so-called invisible for the family, from the state in the form of free education, treatment, and so forth.

Only 30 percent of a textile worker's family budget is now spent on food, 12 percent, on the purchase of clothing, underwear, and footwear, 7 percent, on the purchase of furniture and cultural and domestic articles, and 8 percent, on services for cultural and domestic purposes. The saving bank deposits of a family increased by 235 rubles annually.

All the surveyed families live in well-planned state housing. Houses have electricity, heating, water supply, gas, and sewer systems, 80 percent have hot water supply, 93 percent have bathtubs or showers, and every fifth family has a telephone. These families have 13 square meters of the total (useful) space, including 9 square meters of living space, per family member.

The data of peasants' budgets attest to the changes in the living conditions of the rural population as compared with prerevolutionary Russia. A. I. Shingarev was the first to give a description of the results of survey among peasants in the villages of Novozhivotinnoye and Mokhovatka in Voronezh Guberniya in 1900. He noted that the peasants' standard of living was extremely low. Owing to the meager land allotments, many peasants were forced to lease land from landowners. Two-fifths of the peasant households did not have horses, almost two-fifths did not have cows, and one-fourth did not have cattle. The peasants' food was extremely meager and was based on bread and potatoes. One-half of the families did not consume sugar and butter at all and 25 to 30 percent, beef and mutton. A. I. Shingarev recorded the peasants' chronic malnutrition, especially with respect to products of animal origin.

Peasants' housing was noted for extreme poverty—cramped straw-covered huts with earthen floors. Furniture, kitchen accessories, and dishware virtually did not exist and sack cloth, outerwear, and straw were used instead of bed accessories. Clothing and footwear were basically made by the peasants themselves (homespun shirts, dresses, and bast shoes). Only one out of 10 peasants was literate (they were educated during military service and by relatives, or at best completed one course at the zemstvo school). The chronic malnutrition and antisanitary housing conditions were the causes of the wide spread of tuberculosis, typhoid fever, scabies, and other diseases.

The Rossiya Kolkhoz, which is a millioner, is now located on the land of the villages of Novozhivotinnoye and Mokhovatka, where, as before, a survey of family budgets is conducted. This is a diversified and technically equipped farm. In 1986 the net income of this kolkhoz totaled more than 1,600,000 rubles and profit, more than 50,000 rubles. The high level of mechanization makes it possible to develop agriculture intensively.

Guaranteed monetary wages made it possible to increase the income of kolkhoz members' families significantly. In 1986 the average monthly wages of kolkhoz members were more than 200 rubles, which was much higher than the average in the country. They accounted for more than one-half of the income of the average surveyed kolkhoz member's family. Receipts in the form of pensions, grants, allowances, and various subsidies made up 7 percent of the family budget. Furthermore, the family income increased by another 8 percent owing to free education, treatment, and so forth. Private subsidiary plots represent a substantial support for rural residents. Receipts from them in the surveyed families on the Rossiya Kolkhoz totaled almost one-fourth of all the income. Most families provide themselves with many food products from their private subsidiary plots and sell surplus agricultural products to the state, as well as at the kolkhoz market.

The family of a kolkhoz member spends one-fourth of its budget on food, 16 percent on the purchase of fabrics, clothing, and footwear, and 10 percent on the purchase of articles for cultural-domestic and household purposes, furniture, cars, and bicycles. The kolkhoz has a kindergarten for 90 places, a club, a comprehensive receiving center, and a sewing shop. Every month the family of a kolkhoz member spends 6 percent of its budget on the payment for services for cultural and domestic purposes.

The housing conditions of rural residents have changed fundamentally. A total of 7 out of the 24 surveyed families on the Rossiya Kolkhoz live in kolkhoz houses and the rest, in their own homes. The total (useful) space per family member is 24 square meters, including living

space, 18 square meters. All kolkhoz houses have electricity, water supply, sewer systems, bathtubs, or showers and 43 percent have telephones.

In conclusion we will cite some data on the change in the consumption of food products in the objects of observation enumerated above (see table 2).

Table 2. Changes in Annual Per-Capita Consumption of Food Products in Surveyed Workers' Families (kg)

	Petroleum industry workers in Baku		Workers at the Glukhov Cotton Combine imeni Lenin in Noginsk		Members of the Rossiya Kolkhoz in Voronezh Oblast	
	1909	1986	1909	1986	1909	1986
Meat and meat products	57.8	59.4	12.7	86.6	13.5	55.9
Milk and dairy products	78.0	464.4	53.0	307.7	88.2	286.3
Eggs	77	218	8	290	26	269
Fish and fish products	6.8	11.9	2.0	23.2	2.4	14.4
Sugar	12.8	35.2	4.2	36.5	0.3	27.9
Potatoes	58.8	52.9	86.5	92.2	85.6	128.7
Vegetables and melon crops	32.6	108.7	27.7	91.0	1.0*	70.0
Grain products	177.2	154.3	136.0	85.8	222.0	98.1

*Cucumbers and tomatoes.

Family budget statistics has the indicator of average aggregate income per family member per month. It is important not only for a general evaluation of the level of people's well-being, but also as a kind of standard during the regulation of a number of payments and benefits. It is a matter of allowances for children in badly-off families, of benefits concerning the amounts of payment for keeping children in preschool institutions depending on the average aggregate income per family member, and of exemption from payment or its reduction if children are kept in boarding schools (for single mothers and families where the average aggregate income does not exceed 60 rubles per month).

The amount of average per-capita aggregate income (without taking into account free education, treatment, and subsidies for housing maintenance) is also one of the most important indicators of the population's standard of living. In 1986 a total of 65 percent of the population had an average per-capita income of over 100 rubles per month, including 31 percent, more than 150 rubles.

At the same time, in our country about 100 million people have an average per-capita income of less than 100 rubles per month and there is a significant number of badly-off families with a per-capita income of less than 75 rubles per month.

In accordance with the five-year plan by 1990, owing to general state measures for increasing wages, pensions, and allowances, more than 50 percent of the families will have at their disposal an average per-capita monthly income of more than 125 rubles.

The elaboration of budgets in groupings according to the level of average per-capita income and other social and economic criteria, which are produced periodically for social population groups, republics, krays, and oblasts, is of special importance.

The study of family budgets in combination with other social and economic information makes it possible to obtain a true picture of the standards of living of the Soviet people, which is necessary for the development of measures aimed at further improving the people's well-being and ensuring social guarantees and social justice.

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LABOR

Study of Young Industrial Workers Finds High Mobility Rate

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[Article: "Some Aspects of the Professional Mobility of Youth (based on sociological survey material)"]

[Text] The changing of an earlier acquired trade (or trades) by workers — so-called vocational mobility — is a complicated phenomenon and has an extremely substantial impact both on the development of public production and on the personality formation process. On the one hand, definite expenditures (sometimes extremely significant ones) in time and material resources accompany this process and the process invariably involves losses both for public production and for the worker himself. Whereas a worker can subsequently compensate for these losses (his labor in the newly acquired specialty is paid for at a higher rate), the losses for society are not compensated. On the other hand, technical progress contributes to the appearance of new trades and the disappearance of old ones. In this regard, the change of trades emerges as a necessary condition for high growth rates in the economy and the losses, which are connected with retraining, emerge as unavoidable production expenses. It is necessary to point out the impact of substituting trades on the worker himself: His horizons are broadened and his qualifications are increased.

At the present time, research into the various aspects of vocational mobility is being strengthened. However, there are — as before — many questions in this problem not being worked on. In this case, we are examining vocational mobility from the position of an incorrect occupational orientation in youth when starting training at secondary vocational technical schools. The results of our research into the motives for selecting a trade and the place of its mastery have shown that the advice of friends was the overwhelming motivating factor (approximately 90 percent), i.e., the well known "1 + 1" factor in occupational orientation work with school children (he himself came to learn, bring a comrade).

The mistakes in selecting a trade contribute to the appearance of an irresponsible attitude toward studies and work in some young people.

The main factor in selecting a trade and determining its place in one's life should be the combining of the teenager's interests and inclinations with the requirements of public production for the trades needed by society. This optimum combination should, on the one hand, provide for the selection of trades during training in a UPK [training production combine] considering the interest and abilities of the student; on the other hand, the school has been called upon to orient pupils toward the work trades in which public production is experiencing a need at that moment.

The absence of a selection of trades with a consideration for the pupil's interests in interschool UPK is one of the reasons for selecting future work during job placement or during training in a PTU [vocational technical school], which is not in one's profile. At the present time, only an insignificant portion of graduating students select a future trade connected with the occupational skills received in interschool UPK. At the same time, the selection of youth is increasing both during training in educational institutions and during entry into the work force because of poorly monitored admittance based on medical affidavits.

According to Children's and Juvenile Hygiene Institute data, a certain portion of healthy teenager's (7.3-23.5 percent) cannot master some trades; at the same time, they master other, no less complicated, trades.(1) As a spot analysis has shown, 15-20 percent of those arriving in a machinebuilding type SPTU [rural vocational technical school] are occupationally unfit; and 20-25 percent leave school without having received a specialty. The attachment of the graduating students is also rather low. According to data from 1983 research that was conducted by the Scientific Research Institute for Labor in the enterprises of the Ministry of Light Industry, 36.3 percent of SPTU graduating students were dismissed after having worked one year; half — over the course of two years. More than one-third of those dismissed change trades.

Based on a sociological investigation of young workers, the authors have attempted in the article to analyze certain aspects of vocational mobility in vocational technical school graduating students. Research was conducted in the RSFSR, Armenian SSR, Uzbek SSR, and the Lithuanian SSR in 25 machinebuilding and light, chemical, petrochemical industrial and construction enterprises. A total of 1,063 young workers, who had completed a secondary vocational technical school in 1984-1986 and who had worked independently for more than two years, were queried.

The main parameters of the two groups examined: those who had changed trades at the time of the survey and those who were working in a trade acquired in a SPTU, are given in Table I.

Table 1. Basic Social and Economic Indicators Characterizing the Adaptation of Young Workers in Enterprises After Completing a SPTU

Indicators	Unit of measurement	Those who changed trades	Those who did not change trades
1. Number of young workers	Individual	205	855
	"%"	19.3	80.7
2. Average age	Year	19.1	19.3
3. Percentage of workers performing work in accordance with their awarded category	"%"	50.7	72.3
4. Output norm fulfillment	"%"	102.3	105.8
a)Percentage of those who are not fulfilling output norms	"%"	16.7	10.4
b)Percentage of those fulfilling output norms by 110 percent and more	"%"	14.5	25.5
5.Average wages	ruble	141.2	161.9
a)Average wage of workers included in the last decile	ruble	245	255
b)Average wage of workers included in the first decile	ruble	69.7	91
6. Percentage of PTU graduating students who desire to change trades	"%"	34.1	22.6
7. Percentage of young workers who have not experienced difficulties during their first working period	"%"	7.5	8.5

The high level of vocational mobility primarily attracts attention to itself. Generally speaking, almost one-fifth (19.3 percent) of the total SPTU graduates examined changed trades without having worked for even two years in the specialty they had acquired. The percentage of this category was especially high in light industry where almost one-third (29.3 percent) of the respondents changed trades. Even in those branches examined where the situation is more favorable (the chemical and petrochemical industry and construction), every eighth or ninth graduate (13.8 percent and 12.9 percent of the total number of those who had completed a SPTU in the appropriate branch) is being requalified.

It is hardly possible to consider such rates of vocational mobility during the first years after acquiring a specialty to be normal.

Let us try to investigate where the trouble lies here.

The research conducted showed that a change of trades occurs basically during the first year after completing school, i.e., during the adaptation of the young worker.

At first glance, it seems paradoxical that part of the workers change their trade without having worked even a year. However, this fact receives another interpretation if one considers that a significant number of the respondents pointed out that they did not like their selected trade. The lessening of the examined group's interest in the work selected is closely linked with the transition to practical work. Whereas the percentage of those, who liked their trade during training, was 63.9 percent of those who changed it later and was only a little bit lower than that of the second group (those who did not change trades) — 66.4 percent, only 38.5 percent of the young workers in the first group liked their trade at the time of the survey — at a time when the percentage of an analogous portion, i.e., those who had not changed their profession, in the second group was 70.3 percent.

Evidently, a negative attitude toward a profession, i.e., an incorrect choice of it, also makes for increased vocational mobility.

One of the most important factors, which provide an opportunity for significantly reducing vocational mobility for the examined category, is improving the work to familiarize school children with the distinctive features of this or that trade and developing in them a definite attitude toward the intended type of work. The research conducted shows that almost every fourth person among those entering a SPTU (more accurately, 23.7 percent) regards the selected specialty indifferently. As they become acquainted with the peculiarities of the trade, the number of indifferent people is reduced to 6.6 percent, and the young workers express their attitude toward the trade more definitely. The new educational system and the combining of studies with productive labor are creating good preconditions for the successful solution of this task. Furthermore, pupils must be given an opportunity to change their selected profession during training. In other words, the work of vocational selection and vocational orientation should be conducted not only with school children but also with students in the SPTU.

The timely retraining of a young worker during the training process will be significantly cheaper for society than the inevitable, as a rule, change of professions later with all of the consequences that flow from that.

A negative attitude toward the selected trade is an important — but not the only — factor in increasing vocational mobility. Among those who have changed trades, there are not only those who do not like it; 38.8 percent of those surveyed in this group pointed out that they earlier liked the trade which they had acquired in a SPTU. Consequently, the change of trades was caused by other factors. In particular, the administration, which

was evidently trying to solve its problems at the expense of newly arrived workers, emerged as the initiator of the change of professions in half of the cases.

As is evident from the data that has been cited above, the average indicators of the main parameters of the group, which had changed trades, were significantly worse. Their average earnings are 20 rubles less than their peers in the other group, the average percent of output norm is lower, there are more who do not fulfill output norms and fewer of those who fulfill norms at 110 percent and more.

It follows from the data in Table 2 that those who have changed trades are noted for greater passivity than those who work in some trade or other which has been acquired at a SPTU. This is not surprising if one considers that the level of their training and practical skills is lower than that of the other group of workers.

Table 2. Participation in Technical Creativity, Trades Contests and Socialist Competition (in "%")

	SPTU graduates who have changed trades	SPTU Graduates who have not changed trades
Percentage of young workers taking part in:		
1. The socialist competition of Komsomol and youth brigades	54.1	71.0
2. Trades contests	7.3	17.7
3. The innovator and inventor movement	3.4	6.2

The level of satisfaction with the basic aspects of their work activity among young workers in the first group, i.e., those who have changed trades, is significantly lower than the values of these indicators among young workers in the second group, cf. Table 3).

Table 3. Satisfaction With Various Aspects of Work

	Those, who have changed trades, satisfied	Those, who have not changed trades, satisfied	Those, who have changed trades, unsatisfied	Those, who have not changed trades, unsatisfied
1. Technical level of equipment	46.3	49.9	26.3	24.0
2. Organization of work	46.8	63.7	25.3	13.5
3. Working conditions	50.2	60.1	23.4	20.6
4. Content of work	50.2	63.7	19.0	10.2
5. Wages	42.4	51.5	34.1	27.3
6. Attitude in the collective	75.6	84.6	10.2	4.3

This especially concerns such important indicators as work organizations and conditions and the content of work where the gap in the satisfaction level reaches 10-15 points.

An appraisal of the quality of training in a SPTU on the part of those who have changed trades deserves attention. Half of them think that the necessary level of practical skills was not provided, and one-fifth note a lack of theoretical knowledge. The appraisal of these parameters in the group of young workers, who have not changed trades, is more correct. Here, only 16.7 percent of those surveyed point out the deficiency in theoretical knowledge and 38.7 percent — in practical skills. It is possible to assume from this that an improvement in the quality of training, especially in the portion on practical skills, is one of the factors for reducing irrational vocational mobility.

The data cited show that an early change of trades brings losses both to society (due to a lower fulfillment of output norms, a more passive participation in the public life of a collective, etc.) and to the worker himself for whom a change in work turns into, on the average, a loss of wages, disillusionment and the development of passivity. The existing data are insufficient to define clearly and simply the factors determining vocational turnover. A lower appraisal of such factors as work conditions and organization, the interrelationships in the collective, etc., can reflect both the attitude of the worker and be the result of a young person's dissatisfaction with his trade and a real picture of the work of individual groups of workers: poor conditions, a low organizational level of work, etc.

These questions require careful study.

Footnote

1. Cf. "Mezhotraslevyye metodicheskiye rekomendatsii po psikhofiziologicheskomu professionalnomu otboru" [Interbranch Methodological Recommendations for Psychophysiological Vocational Selection], Sverdlovsk, 1978, p 4.

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ORGANIZATION, PLANNING, MANAGEMENT

Problems of Regulating Machine Idle Time, Shift Work Discussed

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[Article by A. M. Ilyshev and N. N. Ilysheva: "The Mechanism for Controlling Equipment Utilization in Machinebuilding"]

[Text] This article examines trends in creating an economic mechanism for controlling the use of equipment in machinebuilding, as one of the important means for realizing the statewide program for accelerated development of the industry. The necessity for new approaches to assessing effectiveness in the functioning of collectivized means of labor is indicated. Deficiencies in accounting, monitoring, norm-setting, planning and devising incentives for the use of equipment are disclosed. More rational routes for improving the execution of economic control functions are validated.

A considerable rise in the operating effectiveness of the USSR's pool of metalworking equipment determines to a great extent success in restructuring the national economy on the basis of scientific and technical progress and in solving the problems of accelerating social and economic development and of strengthening the country's defense capability. Machinebuilding is one of the most highly equipped industries. The share of machinery and equipment in the cost of productive fixed capital is higher here than in any other comprehensive branch of the economy, and during the past decade it increased from 41 to 49.8 percent [5, p 220; 6, pp 99, 115, 118-119]. About 40 percent of industrial workers are employed in machinebuilding, and almost a fourth of them are machine-tool operators.

Metalworking equipment embodies the newest achievements of scientific and technical progress. Nowadays the introduction of such new- generation machines as flexible resettable systems, automatic lines and equipment with builtin provisions for microprocessor equipment, multiple-operation machine tools with numerical program control, robotics, and rotary and rotary-conveyor complexes is provided for everywhere.

The overall pool of metalworking equipment in our country is vast. According to some data, it exceeds the pool of similar equipment of the USA, Japan and the FRG put together [8, p 146]. This means that machine-tool yield in the USSR's machinebuilding is about half that in some highly developed countries. Differences in the structures of the metalworking equipment pool and of the industry's output are often emphasized. However, to no small extent the differences in levels of machine-tool yield are explained also by inadequate loading of the equipment in domestic machinebuilding.

Thus, the utilization time for production equipment in the GDR's industry is an estimated 16.7 hours per calendar day and the trend is that of an increase and, in so doing, the good indicators of the equipment loading of such machinebuilding combines as Karl Zeiss-Jena, which work in three shifts, in producing microelectronics and refrigerating installations [7, p 56] is especially noted. The same indicator for machinebuilding in the USSR is 9.9 hours per workday and, moreover, until recently, a trend toward a reduction had been manifested [10, page 93; 11, pp 68-69].

Modern highly productive and expensive equipment requires that an extremely high workload level be provided: only in this way is its use effective. But optimal shift-work utilization indicators and the indicators actually achieved in metalworking-equipment operation vary considerably. The Main Directions for Developing the National Economy of the USSR for 1976-1980 called for a rise in the shift-work factor by 20-30 percent, that is, required that it be increased from 1.35 in 1975 [10] to 1.62-1.75 in 1980. However, even until 1985 it remained at practically the former level. For 20 years, for the most important group of machinebuilding equipment—metal-cutting machine tools for basic production—the shift-twork factor fell from 1.64 to 1.39, or by 15.3 percent [9, p 87; 11, pp 68-69]. Even until recently this often was explained primarily by the demographic situation in the country and by social factors. Right now, the time has come for a clear understanding of the fact that it is not a shortage of machine- tool operators but the presence of an excessive amount of surplus equipment at enterprises that is the primary cause of the low workload level.

The data on daily inspections that is periodically organized by USSR TsSU [Central Statistical Administration] could give a definite notion about the share of excess equipment in principle. Thus, for metal- cutting machine tools used in basic production, this share is about 0.6 percent (computed in accordance with [11]). However, under the existing statistical classification, aside from the idle time of surplus equipment, idle time of equipment because of failure to man it with workers and because of the lack of production tasks are also singled out, idle time for the two latter causes exceeding 9-fold to 13-fold the idle time of surplus equipment.

Meanwhile, under a more meticulous examination, it is not difficult to be convinced that these causes are closely interrelated. Indeed, according to computations of production capacity, at many enterprises noninvolvement thereof is great, and much reserve capacity is being maintained. Nevertheless, most enterprises are successfully carrying out the prescribed program for simultaneity in the chronic idling of a part of the equipment, supposedly the result of incomplete manning with workers or absence of a production task. Obviously, there is still a basis for considering surplus that equipment that is not used for the minimum length of time prescribed by the plan.

Thus, certain important causes of metalworking-equipment idle time are not being differentiated with enough precision in statistical practice when its operations are being inspected, and this leads to a substantial understating of equipment that is actually surplus. USSR TsSU's methodological developments do not consider a peculiarity of the economic situation that has prevailed for many years: the implements of labor, being national property, are at the disposal of socialist enterprises.

As was noted at the January 1987 CPSU Central Committee Plenum, monitoring has been seriously weakened in regard to who has socialist property at his disposal and how. It often has been eaten away by bureaucratism and parochialism, it has become sort of "no one's," gratis, deprived of a real master [2, p 9]. Petty tutelage of enterprises and serious infringement of their rights have brought matters to the point where, not having at their disposal a well-proven system for the sale of unneeded or poorly utilized equipment and not being totally confident that henceforth it will never be needed, enterprises have been compelled to maintain a pool of equipment that is excess (in relation to the established production program and the actual potential for acquiring machine-tool operators).

In addition to the above-mentioned factors, the presence of a large amount of underutilized metalworking equipment is explained by the completely inadequate development of specialized production facilities and of centralized supply of spare parts for repair needs, tools, and tooling for all enterprises, and also by the necessity for filling orders not included in the plan, by way of sponsorship assistance to agroindustry and schools, additional tasks for the production of consumer goods, and so on. A selective survey that we made of 15 machinebuilding enterprises with various types of output disclosed the presence of metalworking equipment, 26.7 percent of which was not operated over the course of a day [12, pp 38, 151, 154]. This is almost double the data of USSR TsSU (see [11]), which is explained by organizational and methodological flaws, described later, of statistical surveys that were conducted. An analysis of the results of selected observations have enabled the share of equipment to be determined, which was 16.1 percent during the 11th Five-Year Plan. The presence of a large number of workplaces without workloads and the operation of most machinebuilding enterprises on one shift were described at the Fifth Session of the 11th Convocation of the USSR Supreme Soviet as intolerable extravagance in the use of national wealth [3, pp 12, 17]. At the June 1986 CPSU Central Committee Plenum a similar wanton practice was discussed, and the task was posed of converting machinebuilding everywhere to a minimum of two-shift operation, following the initiative of the Leningraders, which was approved by the CPSU Central Committee.

Since 30 June 1986, Kharkov machinebuilders have been the first in the Ukraine to convert to the two-shift operating mode. According to the calculations of Kharkov economists, this conversion of enterprises of the area will enable the tasks of the current five-year plan to be carried out by 8,000-10,000 fewer metalworking units of equipment, through which 200,000 square meters of production space will be released and tens of millions of rubles of capital investment will be saved [15, p 2]. The CPSU Central Committee, the USSR Council of Ministers and the AUCCTU have recognized that everywhere equipment must be converted in 1987-1988 to two-shift operation, as a rule, and specially built or costly equipment to three-shift operation [4].

However, even now, one can still run across statements suggesting that it is needless to strive for maximum worktime for the machine-tool pool [16]. They are explained by such factors as the artificial opposition of the intensive and extensive routes for increasing the workload of equipment and, mainly, the clearly inadequate degree of responsibility of enterprises for use of the equipment assigned to them. In advancing the first argument, the circumstance that growth of machine-tool yield by any means, which leads to a rise in effectiveness of use of the existing equipment and is an intensification of production (promoting it by improving the use of available production equipment), is disregarded. The second factor especially should be dwelt on. The economico-legal position of the instruments of labor at socialist enterprises has not been completely defined. Being the property of the socialist state, they are transferred for the use of enterprises. The right to make disposition of instruments of labor belongs basically to higher control organs, and enterprises possess only extremely limited functions.

On the whole, the rights and obligations of enterprises as to the use and disposition of the tools of labor are not commensurate enough, and, what is more, they are regulated with varying degrees of thoroughness. Ineffective recompense for production funds, clearly equalizing in nature, is hardly at all a stimulus for creating responsibility on the part of enterprises to the state when the funds are not included in the economic-accountability mechanism of the task for raising the shiftwork factor.

The task, whose time objectively has come, of raising considerably the degree of actual collectivization of the instrumentss of labor for the purpose of increasingly their utilization greatly requires the solution of a number of urgent theoretical, methodological and applied problems.

In the *theoretical* area, it is the problem of deepening the development of questions about the creation and functioning of the economico-legal mechanism for controlling the use of production equipment (national, branch, and regional). In the *methodological* area, the problem of differentiating the spheres of use of the categories of productive capacity, fixed capital and equipment in control and planning deserves special attention. Thus the excessive accent on the category of production capacity and the attribution to it of a dominating nature that is

now occurring is not legitimate. Meanwhile, the structuring of yield on capital which was done on the basis of representative data has indicated an insignificant influence of the dynamics of productive-capacity utilization on change in the yield of fixed capital, in view of the considerably closer tie of the dynamics of yield on capital with the use of an integral workload of the installed equipment [18, pp 46-47]. In the area of *applied developments*, a degree of perfection must be achieved in the study of applied questions that would enable two or three machinebuilding ministries to perform a broad-scale economic experiment on increasing effectiveness in controlling equipment utilization and, in accordance with its results, and would enable provisions to be made everywhere for introducting the most acceptable solutions. As for the experience that the country's various enterprises have gained in the use of intraplant systems for planning, accounting and providing incentives for a high workload for equipment, it cannot, as a whole, despite the presence of various positive factors, serve as a basis for a large-scale experiment.

In our opinion, the basic components of the economic mechanism for controlling the use of metalworking equipment should be: a system for reliable accounting and active monitoring of the equipment's operation; an aggregate of well-founded standards that directly characterize its workload; scientific methods for intraplant planning and stimulation of a high level of equipment utilization; and, for the present, comprehensive analysis of existing reserves. The validation of certain proposals for developing the elements of this control mechanism is cited below.

Daily observation of production-equipment operation, which has been performed now over a period of 30 years, periodically repeated each 2-3 years, lies at the basis of the existing state and branch systems for reporting and monitoring. For its time this was a progressive beginning. Most enterprises, under the methodological supervision of USSR TsSU, were prepared fairly thoroughly for the conduct of large- scale surveys of equipment utilization, and the data obtained were analyzed in detail.

However, over the course of time it was found that a number of serious program, methodological and organization defects were inherent in the observation system being examined, which were increasingly telling on the completeness and reliability of information about equipment workloads.

First, it is noncontinuous and inadequately representative in nature. The metalworking equipment of the machinebuilding ministries is covered during this observation by the main-body method, but for the nonmachinebuilding ministries only a small part of the appropriate equipment is surveyed. In other words, the use of a large amount of the production equipment of "secondary machinebuilding," which cedes little to basic machinebuilding in size of the equipment pool, remains outside the field of view of organs of state statistics and economic control. What is more, the average indicators of the workload of metalworking equipment as a whole inevitably proves to be overstated through the presence of a systematic error of representativeness that is substantial in amount. The nature of it is simple. In the USSR 44 percent of the metalworking equipment is external to machinebuilding and has a shiftwork factor of 0.4 [8]. If a survey covered all the equipment of basic machinebuilding and, for example, 4 of the 44 percent of "secondary machinebuilding," then the shiftwork coefficient found by direct computation (in accordance with data from a survey with a coverage of 60 percent of the total metalworking equipment pool) will be 1.33. A weighting of utilization indicators that are obtained directly from observational data, for the share of metalworking equipment in basic machinebuilding and outside it (56 and 44 percent, respectively), gives a completely different, more realistic shiftwork figure—0.96. The extremely striking difference of 0.37 percent also is a systematic error of representativeness, that is, the error of inadequate representativeness in a noncontinuous survey of the more poorly utilized part of the equipment. It cannot be considered to be precise, since statistical publications lack separate information on the shares for each of the portions of the machinebuilding equipment that are subjected to the survey, the indicators of utilization thereof, and the methods for selecting the units for the noncontinuous survey.

Second, the group photography method is used everywhere for recording intrashift idle time of equipment when its workload is being surveyed. But the constant presence of the recorder near the machine tools that are assigned to it inevitably introduces distortions in the usual production rhythm: idle time that depends upon the workers is sharply reduced, and measures are taken more expeditiously to prevent or to speed up the elimination of idle time that results from organizational or technical causes. Moreover, a disregard for brief idle time, less than 5 minutes, which is correctly called concealed idle time by L. A. Konovalov and V. Ya. Medikov [13, pp 31 and 33], is characteristic of group photography. Large-scale surveys conducted at the Yaroslavl Motor Plant showed an average 43 such brief idle periods per shift for one machine tool with a total duration of 42 minutes, or 9 percent of the shift time [12].

Therefore, the data ordinarily used widely about the existence of only 10.7 percent intrashift idle time for metalworking equipment are considerably understated [11]. Selective surveys carried out at 15 machinebuilding enterprises of Kalinin, Kharkov and Yaroslavl oblasts by snapshot photography of equipment operation disclosed the occurrence of 35.4 percent intrashift idle time [12].

Third, a major organizational defect of daily observations over metalworking-equipment operation is that they are conducted by the forces of the enterprise itself, without any kind of monitoring on the part of neutral

and local statistical organs, which inevitably leads to distortion of the results obtained. Over the course of time, systematic error that is one-sided in orientation is the essence of self-recording—and it is precisely on this basis that daily surveys by enterprises themselves have been organized—and as a rule, it grows, since an absolute majority of enterprises does not desire to be judged this year by equipment-utilization indicators that are worse than those of the base period (indeed, their true value right now is not validated by anyone).

Table 1 data shows the difference between the amount ofs intrashift idle time indicated in the reporting of machinebuilding enterprises and that obtained by conducting representative outside observations of metalworking-equipment operation. These differences are especially great, for the following reasons, which have been subjected to the greatest criticism on the part of superior economic and controlling organs: a lack of raw and other materials, blanks, and other supply items and services; the absence of workers with administrative permission because of illness and so on; the absence of workers in connection with a labor-discipline violation; and other intrashift idle time. Obviously, it would be unpardonable from the social and economic point of view to consider the value of the evaluated indicators of equipment utilization that are indicated in the enterprises' reporting on form No I-TP (Machine) to be true and not monitor its meaning at all.

Table 1: Intrashift Equipment Idle Time by Cause, Percent of Available Time of Machine-Tool Shifts Worked*

Cause of intrashift equipment idle time	According to enterprise statisical reporting		According to outside selective surveys
	14 May 75	19 May 82	1977-1982
Disrepair or unplanned maintenance of equipment	1.6	1.7	2.1
Setting and adjustment of equipment	1.8	1.9	2.0
Lack of raw or other materials, blanks, parts and components	2.5	2.2	4.7
Lack of tools, acces sories, technical papers, electricity, heat, com- pressed air, elevating and conveying equipment	0.8	0.8	3.3
Workers' absence with administrative permission because of sickness, and so on	0.9	0.7	1.4
Workers' absence because of violations of labor discipline	0.3	0.2	8.1
Other intrashift idle time	2.1	2.8	13.8
Total idle time	10.0	10.3	35.4

*Compiled from data presented in [10-12].

The flaws noted above, which distort the real picture of equipment utilization, require a more thorough solution of important program, methodological, and organizational questions about observation. In order to eliminate these flaws, above all, group photography must be replaced as the basic method for obtaining information about equipment operation by snapshot photography, which is selective in space (by virtue of its high economy and authenticity of source information). As a result, the cost of one statistical survey would be reduced by at least 20-fold to 40-fold. In 30 years of performing regular daily observations in the country, the direct overexpenditure of resources just for obtaining incomplete and unreliable information about the metalworking-equipment workload has already amounted, according to our calculations, to 20-25 million rubles. Moreover, instead of covering more than half of the whole pool of metalworking equipment by the main- body method that is now being practiced, a selective observation of 5 percent should be organized, with provisions made for strict proportional representation in the selection of all typical groups of equipment, particularly of the equipment of basic machinebuilding and of equipment outside it. It is desirable to supplement this survey, which is carried out by elements of the enterprises' workers, with monitoring surveys carried out simultaneously by workers of local statistical organs and of counters recruited from outside (workers of scientific- research institutions and vuzes) of 10 percent of the enterprises that get selected. Only in this way will the control function of state statistics be performed in full measure.

Finally, the nationwide system for reporting on and monitoring equipment operation should be supplemented by branch-of-industry regional systems, which must be constructed on those same organizational and methodological principles: the conduct of surveys that are external to the enterprise, the wide use of progressive varieties of snapshot photography, the use of observations, selective in space, of a portion of the equipment, and organization of active monitoring of the authenticity of the results obtained. Fifteen years of experience in the performance daily of snapshot photography, selective in space, of equipment operation at a group of enterprises allows one to say with confidence that at small and medium-size enterprises (with equipment pools of up to 1,500-1.800 units) representative daily observations can be organized with the efforts of only two or three

recorders. Only for large enterprises should the number of monitors be doubled or tripled.

Thus, regular observations of metalworking equipment operation can be organized externally, since at any machinebuilding center of the country, local statistical organs can be enlisted as monitors for a brief period, as can a limited number of students of engineering and economic specialties, workers of scientific institutions, and others, who are easily trained (the same as is done, for example, during the conduct of a population census). Similarly, it is desirable to prepare personnel support for the operations of monitoring equipment utilization in the appropriate branch and territorial systems.

The development and introduction into economic work of methods for the direct setting of norms for the equipment-workload level and the use of interbranch, branch and factory norms are called upon to promote higher- quality solution of tasks for controlling the utilization thereof. There is the possibility for validly reducing the amount of equipment that is inactive and greatly underutilized, of successfully opposing a negligent attitude toward it, of raising shiftwork factors to an optimum value, and of greatly reducing unregulated intrashift idle time.

The standards for equipment workload should be in the nature of model values which are determined on the basis of progressive design solutions, the best indicators actually achieved at home or abroad, and values found by research methods. The origin of their creation is laid in the current five-year plan: for the first time, branch norms for the annual fund for equipment operation and for shiftwork factors are being approved [14]. The task of creating theoretical and methodological bases for scientifically substantiated standards for equipment utilization and for experimental development, differentiated by branch, type of production, and form of organization of the economic-standards service will thereby become more urgent. It is desirable to include in the standards the average annual share of operating equipment in the amount of equipment installed and the average annual coefficient for intrashift equipment utilization.

The standard value for the share of operating equipment is computed as the difference of unity and the standard value for the share of inactive equipment, for all regulated causes, in the total pool thereof. Idle time of equipment in reserve or in planned preventive maintenance and idle time for social causes are included in the regulated causes.

The total amount of reserve equipment is made up of three components: mothballed equipment; the special operational reserve; and the reserve for assimilating the production of new output. The amount of mothballed equipment is regulated by government decrees and official decisions of higher economic organs. According to the data of a selective survey of five Kharkov machinebuilding enterprises, the share of mothballed equipment in the installed volume is 1-1.8 percent.

The special operating reserve consists of duplicate machine tools, the objective requirement for which arises because of breakdowns of equipment caused by the concealed defects of manufacturing plants. Its standard value can be figured on the basis of the methods of the theory of large-scale servicing, which permits an optimal value for the reserve to be found by means of minimization of total losses from the upkeep of machine-tool duplicates and emergency idle time of the basic equipment (at the five machinebuilding enterprises surveyed, the special operational reserve was 1.6-1.9 percent of the pool of installed equipment). The standard value for reserve equipment for assimilation purposes is determined as the average supplementary requirement— above the average normal of its value for ordinary years— for a year of intense mastery of new output. The calculations made for the five enterprises indicated that it varied within the 1.1-3.7 percent range for the total pool of installed equipment.

The standard value for whole days of idle time as a result of the time that equipment spends in planned overhaul is computed according to the Unified System for Planned Preventive Maintenance of Equipment and is 3.8-5.6 percent of the available operating time for the machinebuilding enterprises surveyed. Social causes of regulated idle time for whole shifts includes time for machine-tool operators and workers to perform state and the more responsible public obligations. For the five Kharkov enterprises it was 0.2-0.6 percent of the operating time.

Thus according to calculations that have been made, the total value of regulated whole-day and whole-shift idle time for all five components described above varied between 9.1 and 12.2 percent (the average was 10.6 percent) for the various enterprises. The latter signifies that the average annual standard value for the share of operating equipment in the amount installed is 0.894, while the standard shiftwork factor is 1.79, or twice as much (in machinebuilding, two-shift machine operation predominates).

A correct determination of the second of the standards described—the coefficient of intrashift use of operating equipment—leads to the necessity for differentiated norm-setting for intrashift use, which is based upon the following three methodological principles. First, idle equipment time that occurs because of regulated consumption of machine-tool operators time for rest and personal requirements, servicing of the workplace, preparatory and concluding operations, and the execution of social obligations are subject to norm- setting. All types of nonregulated idle time for organizational or technical factors and because of violations of labor discipline are not subject to norm-setting. Second, the standard values for time for rest and personal needs,

Table 2

Reporting Balance Sheet of Workload of Basic Types of Metalworking Equipment (for an Economically Accountable Department of an Enterprise with Series Production), thousands of machine-tool hours

Type of equipment	Time resources					Areas of time expenditure							
	Calendar time, T_k	Necessary deductions therefrom			Total resources or available time, T_p (Gp 1-gp 2-gp 3-gp 4)	Useful machine time, T_m	Subject to decrease of expenditure, total	Including					Total expenditures (group 6 + group 7)
		T_e	T_z	T_l				T_b	T_c	T_h	T_{ts}	T_i	
Metal-cutting machine tools	770.9	268.2	38.3	21.9	442.5	147.1	345.4	4.1	126.4	94.0	46.5	24.4	442.5
Forging and presswork-ing machines	411.7	140.2	20.4	12.7	238.4	77.2	161.2	1.8	94.4	42.2	14.8	8.0	238.4
Electrical welding machines	192.7	69.1	9.6	4.5	109.5	52.9	56.6	1.2	16.8	23.5	11.6	3.5	109.5

servicing of the workplace, and the fulfillment of preparatory and concluding operations should be determined in accordance with existing collections of labor standards. Third, the standard coefficient for intrashift use of operating equipment must be differentiated by such basic forms of organization of servicing thereof as individual, group or multiple machine-tool servicing. Clearly ineffective forms of operation of a portion of the equipment pool (sequential servicing and underutilized equipment that operates periodically) engendered by a wasteful attitude toward the use of collectivized means of labor, should not be considered in norm-setting calculations.

Calculations carried out for the five Kharkov machinebuilding enterprises indicated that the relative value for the standard for intrashift idle time averages 13.9 percent, while intrashift utilization of operating equipment is 0.861. Having summarized the results of the setting of norms for intrashift, whole-shift and whole-day use of equipment, the standard annual fund for equipment operation can be calculated, as can the whole aggregate of standard coefficients for equipment workload: utilization of the pool of installed equipment, the shiftwork factor for operating and installed equipment, and continuous, intrashift and extensive utilization as a whole. The development of long-term economically substantiated standards is a reliable basis for creating a mechanism for controlling equipment utilization. These standards, differentiated by branch, type of production and form of organization for operating the implements of labor, can be made the basis for intraplant planning and for incentives for a high level of equipment workload.

In order to raise the activeness of intraplant economic accountability—particularly an intensification of its influence on the utilization effectiveness of the equipment assigned to an economically accountable subunit—planning of the annual time available for equipment operation is applicable. An important advantage of this indicator is the possibility of correlating calculations of the labor intensiveness of the production program with other engineering-economics indicators and of applying the balance-sheet method of analysis and planning for substantiation thereof. It is desirable to begin this substantiation with the construction of a reporting balance sheet of the workload of the equipment of an economically accountable subunit for the base period and of an analysis of the corresponding indicators.

At first glance, the source of the equipment operating-time resources is the calendar time budget T_k, and all the deductions from it—areas of the expenditure of the resources. However, upon closer examination, it turns out that these areas clearly are not of equal value. The time that equipment spends in reserve T_z and in planned-preventive maintenance T_l, and also nonoperating time T_e are in essence necessary deductions from the calendar fund. Their mandatory nature leads to a revision of the concept of the equipment's actual worktime resources. They are the available time T_p.

Based upon the concept of available time, the process of forming actual worktime resources of the equipment can be presented as the difference of the calendar time and the nonoperating time, and also of planned idle time in reserve and in maintenance. The total value of the available time can thus be obtained as the sum of the following components thereof: useful machine time T_m, machine time spent on rejects T_b, auxiliary, preparatory and concluding time T_c, unplanned intrashift idle time, and also whole-shift and whole-day idle time (T_{hand} T_{ts}, respectively), and excess time T_i.

The second method for determining the available time permits the regulated areas for expending time resources for equipment operation to be described. Thus, the planned fund of time can be increased primarily by reducing the excess time (by adopting socialist commitments for production of the basic output and additional tasks for manufacturing consumer goods, filling orders for the needs of the agroindustrial complex, and so on).

The basic source for increasing the time fund for machine-tool shifts being worked is a reduction of unplanned whole-day and whole-shift idle time for all causes by developing and executing the appropriate organizational and technical measures, as well as measures for strengthening labor discipline, order, and the state of organization during production. A detailed analysis of existing reserves can be made also for another fund. However, it does not change the key role of the disposable time—the main source of time resources for equipment utilization.

Everything that has been set forth above allows theoretical and methodological substantiation to be given for the form for the balance sheet of the metalworking equipment workload proposed below, by type, and taking into account the type of production (table 2). The left side of it (the resource side) characterizes the process for forming resources, the right side the areas where they are expended.

The analytical indicators for the reporting balance sheet can be subdivided into those indicators that enter into the overall system and the specific indicators for the balance sheet of the equipment utilization indicators. The first include: the coefficient of intrashift equipment utilization, the machine-time factor, and the coefficient of extensive utilization of equipment for time actually worked off and for machine time. The specific indicator for the reporting balance sheet is the amount of time, measured primarily in machine-hours or machine-tool hours, worked off by a unit of installed equipment during the reporting period. And the share of the necessary deductions of machine-tool time in the calendar time, which is computed on the left side of the balance sheet for all deductions as a whole and for each type, can be determined. The right side of the balance sheet describes the structure of the expenditure of resources of the available time, by area, and the structure of the unused reserves (which are subject to reduction of the elements of the poorly productive and the nonproductive expenditure of resources of the available time).

Moreover, the reporting balance sheet permits computation of the share of useful machine time in total amount machine time, in the total time for machine-tool shifts worked, and in the planned time. Finally, the share of the time actually worked in the planned time and the available time is computed. This enables the analysis of the reserves and sources of growth of the equipment workload to be deepened. The reserves for increasing the available time include reduction of nonoperating time (through the introduction of continuous schedules for equipment operation), saving of the standard time for planned-preventive maintenance (through the introduction of progressive technology and organization of maintenance work), and reduction of the amount of equipment that is in reserve.

And so the report balance sheet is an effective means for systematizing information about equipment utilization, by means of which the process of forming the reserves of available time, the areas of their expenditure are characterized, and the existing reserves are revealed.

The results of the reporting balance sheet can be generalized to best advantage by constructing standard and planned balance sheets of the equipment workload. In this case the balance sheet emerges as a means for mobilizing discovered reserves. Indeed, all organizational and technical measures for improving the use of equipment that has been developed (with orientation to the standard levels of the indicators) and is intended for introduction reduce the value of some kinds of expended categories in the planned balance sheet and thereby increase useful machine time. Thus, the balance-sheet method is completely acceptable for the needs of intraplant planning for utilization of the available time budgeted for equipment utilization.

As indicated in table 3, it is desirable also to examine the main results of the development of standard, reporting and planned balances of equipment workload in the aggregate. It follows from table 3 that the standard value of the share of equipment that is inactive, for all regulated causes, in the total pool thereof, is 10.6 percent (the sum of T_z and T_l for the first line, that is, 5.9 and 4.7 percent) and for the intrashift use of operating equipment it is 86.2 percent (the sum of T_m and T_c, relative to the sum of T_m, T and T_h).

A comparison of the actual indicators of the base period with the normative indicators, which are of a model nature, permit the necessary level of plan indicators to be established validly. According to the date examined in the table 3 example, the most important of them are the following:

	Standard Value	Actual Value	Planned Value
Ratio of operating equipment to installed equipment, percent	89.4	83.0	84.8
Level of intrashift utilization of existing equipment, percent	86.2	74.4	80.2
Annual worktime available for a unit of installed operating equipment, hours	4,091	3,108	3,483

Table 3

Standard, Actual and Planned Indicators of Balance Sheet of Workload of Metal-Cutting Machine Tools (for Economically Accountable Departments of Enterprises with Series-Type Production)

	Time resources					Areas of time expenditure							
		Necessary deductions therefrom			Total		Subject to decrease in expenditure, total	Including					Total expenditure, T_p
	T_k	T_e	T_z	T_j	T_p	T_m		T_b	T_c	T_h	T_{ts}	T_i	
Standard													
percent....	100.0	35.2	5.9	4.7	54.2	28.0	26.2	-	18.7	7.5	-	-	54.2
thousands of hours.	770.9	271.4	45.5	36.2	417.8	215.8	202.2	-	144.2	57.8	-	-	417.8
Actual thousands of hours...	770.9	268.2	38.3	21.9	442.5	147.1	345.4	4.1	126.4	94.0	46.5	24.4	442.5
Planned thousands of hours...	770.9	271.4	45.5	36.2	417.8	174.4	243.4	-	132.2	75.9	23.2	12.2	417.8

The rather high values for standard and planned indicators for equipment utilization that were obtained in the aforecited computations are explained by the fact that they consider the necessity for converting all highly productive, specially made, and science-intensive equipment to three-shift and four-shift operation [4].

It will also be necessary in the nearest future to prepare enterprises (or associations) of two or three machinebuilding ministries for introduction of the proposed methods of accounting, monitoring, setting of norms, intraplant planning, and incentives for a high level of equipment workload. The results of this experiment will enable final conclusions to be drawn about the practical acceptability of various elements of the economic mechanism for controlling equipment utilization, with a view to further improving and introducing this mechanism as a whole unuversally.

The Program of the Communist Party of the Soviet Union has determined that in the forthcoming 15 years "the existing tendency toward reduction in yield on capital is to be overcome, and the yield is to be increased" [1]. Never before has this task been formulated with such maximum clarity as a long-term task, the solution of which is distributed in time. Already during the current five-year plan it is planned to cut to less than half the rate of lessening of yield on capital in the national economy, and, in machinebuilding, to overcome this negative trend of many years (see [3]).

The latter is especially important if one considers that in 1960-1975 the trends in yield on capital for Soviet and American machinebuilding were close (for the indicated years the yield-on-capital indicators rose by 19.9 and 23.8 percent, respectively), while in recent years yield on capital in the USSR's machinebuilding was reduced by 10.3 percent and the yield on capital for the USA's machinebuilding continued a general trend toward growth [6 and 17]. Meanwhile, a further strengthening of socialism's economic base—collectivized means of production—enables a level of asset capital utilization to be achieved that is higher than under capitalism. A radical restructuring of the system for economic control, relying on development of the workers' initiative, energy and creativity, will enable the potential advances of the Soviet social order to be used fully.

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11409

Competition in Machine Building R & D Urged

18230023a Moscow PARTIYNAYA ZHIZN in Russian No 3, Feb 88 pp 30-34

[Article by I. Silayev, deputy chairman of the USSR Council of Ministers, chairman of the Machine Building Bureau USSR Council of Ministers: "A Most Important Stage in the Development of the Machine Building Complex"]

[Text] The rates of the country's economic growth depend to a decisive degree on the effectiveness of the reconstruction of machine building, which determines scientific and technical progress in other branches. This was substantiated in the decisions of the 27th Party Congress and subsequent plenums of the CPSU Central Committee, which set for machine builders the most important tasks for accelerating technical reequipment of industry in the country.

Today the machine building complex has an immense scientific and production potential. More than 1,500 of its production associations and enterprises each year produce products in a volume of about 100 million rubles, and about 2,000 models of new kinds of technical equipment are created. Domestic machine building today provides all the equipment for the major energy engineering facilities in the country, and it produces technological equipment for extracting and transporting petroleum and gas, powerful technological lines and equipment for chemical production, unique equipment for scientific research, and many other kinds of new, highly productive equipment.

At the same time the existing production and scientific-technical potential of machine building is far from fully satisfying the needs of the country's national economy during the period of intensive economic restructuring. The country needs new generations of highly effective, economical, and reliable machines, equipment, and instruments that correspond to the world technical level.

It must be noted that by the beginning of the 12th Five-Year Plan, when machine building was given the task of providing for radical technical rearmament of the national economy, the situation in the branches of the complex was extremely unfavorable. The assignments of the 11th Five-Year Plan were not fulfilled. The rates of industrial production were much lower than intended. Moreover, only one-fourth of the equipment produced corresponded to the world technical level.

Among the reasons for the arrears one must note the long-standing false ideas about the supposedly high level of our technical equipment. The leaders of our branches were in no hurry to take advantage of the corresponding highly effective technical achievements or to introduce electronics or automation of engineering labor. They did not attach the proper significance to the development of the experimental and testing bases. From year to year less and less attention was paid to questions of the quality and reliability of the machines. Departmental separation gave rise to a vicious circle of mutual dodging of responsibility for the poor results.

All this was the basis for the serious and justified criticism against the machine builders. The complex was given a task of exceptional difficulty: under the 12th Five Year Plan, mainly as a result of increasing labor productivity, to provide for a 43-percent increase in the output of machine building products. The updating of the products being produced along with a significant reduction of the cost price was to be accelerated by a factor of 4. Under the 12th Five-Year Plan we must assimilate more than 6,500 kinds of just the most important products of new generations.

The task is not only to develop from the beginning and assimilate in production an unprecedentedly large quantity of technical equipment in short period of time, but also to make sure that 85-90 percent of it corresponds to the world technical level. It is necessary to increase the productivity and reliability of the technical equipment that is developed by a factor of 1.5-2 along with a significant reduction of the time periods for its development.

And what is the main thing that determines the successful solution to the problems set for the machine building complex? It is possible to create new generations of machines, equipment, and instruments in short periods of time only by fundamentally restructuring the work of branch science and raising the level of automation of planning and design work and technological preparation of production. I must add that under the conditions of full cost accounting, on 1 January of this year all scientific research, planning-design, and technological organizations of the machine building complex began to operate with extensive introduction of the principles of the brigade contract.

One must say directly that there are still many difficulties here. The most complicated is the changeover from the centralized method of financing the "life" of the scientific organizations to financing individual developments. A cost accounting organization should earn its own money for today and for its future development. The direct path to this lies through effective planning of modern and high-quality items, and the sale of these plans to interested consumers. The scientific research organizations and design bureaus carry out some of their programs under direct agreements with other enterprises. Scientific organizations realize other plans using their own money from the unified fund for the development of production, science, and technology.

And the most important groups of work are documented through agreements between the scientific organization and the state. We are speaking about state orders for scientific research and engineering design work (NIOKR) related to the development and creation of the most important kinds of technical equipment, technology and materials and about large-scale developments in the interests of the entire national economy or groups of branches. This scientific research is financed by the state and its guarantees the introduction of its most important results into production.

An important function of the Machine Building Bureau of the USSR Council of Ministers is to monitor the process of the formation of a single main list of state orders for NIOKR for the machine building complex and also to be concerned about eliminating the monopolies of individual developers of various kinds of products through the organization of development competitions, parallel competitive planning, and the creation of a reserve of plans that have been developed and are ready for assimilation.

Plans for NIOKR are now formed by the scientific organizations and subdivisions themselves. And one must say that the ministries still let go of the "reins of government" in the development of long-range strategic scientific and technical problems, which should determine the future of the branches. Because of this the role of the head scientific research, design, and technological organizations of the ministries increases significantly.

The determination of the true cost of scientific developments is impossible today without observing the principle of comparability and it involves conducting various competitions for the creation of designs and models of machines, equipment, and instruments that are most important for the national economy. But the organization of truly creative competition within a single branch will hardly produce the desired results. It is more likely that a limited number of organizations will participate in it. The participants in the competition are not likely to produce original new solutions since they will be based on developments that have been the leading ones in the branch for many years. It would seem that the departmental approach and the absence of an atmosphere of true competitiveness will also have their effect.

The organizers of the new type of competition should be the involved ministries of the machine building complex or the USSR State Committee for Science and Technology in conjunction with the branches that will be the consumers of the future products.

What can such innovations do and what are they already doing? Organizations and collectives of any branches of the national economy can participate in the new type of competitions. They can include cooperatives, voluntary creative associations, and individual citizens. The main conditions for evaluating the works that are submitted are the development's innovation, originality, effectiveness, and whether it corresponds to or surpasses the world technical level.

Another significant factor is that the winners of the competition can expect a fairly large material remuneration of several tens of thousands of rubles. Encouragement is given for the most successful individual solutions with bonuses of 1,000 rubles and more. Moreover, it is guaranteed that the best designs will be introduced into production in the shortest possible time period, which is provided for by the corresponding decision of the Machine Building Bureau of the USSR Council of Ministers.

The machine building complex is taking its first steps in this direction. The USSR Council of Ministers has now already published a number of instructions concerning the beginning of such competitions. Last year competitions were declared for the development of a design-plan for the interiors of passenger elevators for residential buildings, a draft design of a wheeled universal plowing tractor with an integrated circuit with 150 horse power, a design-plan for a mainline steam engine, a model of an on-board microprocessor controller for driving machines, and others.

We have already summed up the results of the competition for the development of a design-plan for a car for a new generation of subway. The first experiment turned out to be successful and very interesting, profoundly considered, and innovative developments were submitted. The first prize of 20,000 rubles was awarded to the design-plan submitted by the collective from the Avto-VAZ automotive construction association.

The design commission considered it expedient—and the Machine Building Bureau of the USSR Council of Ministers agreed with this—to award second prize to a plan with the slogan "Silver thread" for its high quality and the depth of the development of the basic solutions for the new subway car, and also to award monetary bonuses to a number of other participants in the competition for their initiative and innovative solutions.

The Machine Building Bureau of the USSR Council of Ministers will continue in the future to devote the most serious attention to organizing and conducting such competitions. Why? It is no secret that to do a design-plan for this same subway car according to the established "directive-planning" technology would require incomparably more time and the allotment of a considerable quantity of additional material and human resources as well as other expenditures. And the result from this work would be of an unpredictable level and presented in a single variant so there would be no choice.

What else draws our attention when analyzing the first steps taken in the direction of organizing and conducting unionwide competitions? It is the passive position of the ministries and their head development institutes, whose products the competitions are intended to improve. Under constant pressure from above, they delay in preparing the technical specifications and conditions for conducting the competitions. This also indicates the existence of a psychological barrier for the "staff" developer, with whose "achievements" the competition winners compete.

Fairly frequently in certain ministries one encounters an inattentive attitude toward small creative collectives and individual specialists who submit original developments, new solutions to traditional problems, and new directions for research and development. Most frequently the innovators receive skillfully prepared rejections or conditions and requirements that are known to be impossible are placed on them. In the majority of cases the experts of one ministry or another do not deny the usefulness or significance of the results obtained by the authors, but the real assistance and support the innovators need drowns in the bureaucratic whirlpool.

The increased activity of the Soviet people developed during the process of restructuring and the aggressive civic position demand active party support and responsive action on the part of the leaders of branch science and the production commanders of machine building ministries.

It is typical that in a number of cases when innovative suggestions in terms of their significance go beyond the sphere of the interests of a single ministry, the Machine Building Bureau of the USSR Council of Ministers takes charge of their verification and realization.

Thus, for example, with the assistance of the Machine Building Bureau of the USSR Council of Ministers, the group under the engineer Yu. Savchenkov, which had created models of multiplex electric wiring for motor vehicles, was transferred to continue its work in the scientific research institute of automotive electronic and electrical equipment which specializes in this subject. Work is being done on the problem of industrial assimilation of a series of electronic-optical devices developed under the leadership of Doctor of Technical Sciences N. Ninchenko. These significantly surpass the world technical level and have been tested successfully in various kinds of technological equipment.

There is also a need to develop new regulations for the consideration and verification of the scientific-technical or technological value of innovative proposals. It would be expedient to take the path of creating special "risk" funds in the branches for support and to establish

"open" laboratories in which talented individuals and creative groups could have the opportunity to bring their ideas to the point of realization and confirm their value using the most progressive technological equipment. Moreover we must establish the measure of responsibility for passivity in realizing valuable ideas and developments and for the losses to the country's national economy caused by bureaucrats.

Today it is becoming increasingly obvious that far from all leaders of branch science, general directors of associations, and directors of scientific, design, and technological organizations of the machine building complex are prepared to head scientific organizations under the new management conditions and provide for fulfillment of the difficult assignments for creating the latest technical equipment.

We are just beginning to tackle this exceptionally important problem. Here, I must say frankly, we are relying strongly on the active and involved assistance of party and soviet agencies in the local areas. We shall also rely entirely on the new standard provisions concerning head scientific organizations which determine the responsibility of their managers for the technical level of products, the coordination of research and development being done in the branches, and the real economic effectiveness from the introduction of new machines and equipment into the national economy.

The problem of promptly providing progressive new materials and batching items for newly created technical equipment is crucial. This problem has practically not budged. The developers of new technical equipment are obliged as before to order in good time not only new materials, but also those that have been produced for a long time, which, as a rule, do not meet modern requirements. And it is only in rare cases that the design organizations manage to acquire the progressive materials and batching items which should be created especially for the new technical equipment. And frequently there is a great delay, which also has a negative effect on the matter.

It would seem that taking full advantage of the Law on the State Enterprise (Association) will make it possible for scientific research institutes and design bureaus to solve these problems operationally, on the basis of the development of direct ties with enterprises of the raw material ministries. Moreover, in order to promptly provide the developers of new machine building equipment with progressive materials, apparently, we will have to organize their experimental industrial production at enterprises of the machine building complex. Thus even this year we are planning to create an interbranch scientific production association with a developed material science section, an experimental base, and a testing industrial production capable of manufacturing the necessary materials in volumes that satisfy the needs of the developers of new technical equipment in all machine building branches.

Radical improvement of the quality of machine building products and the achievement of advanced scientific and technical positions in the world require accelerated renewal of fixed production capital and the introduction of modern technical equipment. The restructuring of the investment and structural policy envisions a redistribution of capital investments in favor of the machine building branches. To this end, for machine building ministries these investments are being increased by a factor of 1.8 as compared to the 11th Five-Year Plan.

The current reconstruction of machine building production also imposes requirements for a sharp improvement of capital construction and increased effectiveness of capital investments. Methods of construction with internal financing are being further developed now and the volumes of construction and installation work are increasing from year to year. Measures for raising the level of its industrialization and for expansion, capital improvement and the creation of bases of the construction industry have been developed and are being introduced.

But the restructuring in machine building and construction ministries and certain local party and soviet agencies has not yet taken place when it comes to providing for the priority of the construction of facilities of the machine building complex.

There is no hiding it: we are still building slowly. According to data of the USSR State Committee for Statistics, the average actual duration of the construction of facilities of heavy and transport machine building is 12.2 years instead of the 3.5 years according to the normative time periods, the electrical equipment industry—7 years with a normative of 3 years, and tractor and agricultural machine building—7.5 years instead of 4.

There are also record holders in "long-lasting construction." For example, the Kamyshin forging and smelting plant and the Krasnodar Oktyabr plant of the USSR Ministry of Ministry of Agricultural and Tractor Machine Building have been under construction for 18 and 10 years, respectively. With such rates of construction of facilities it is impossible to provide for fulfillment of the established assignments for creating new capacities for the machine building complex.

A certain amount of work has been done to increase the effectiveness of the utilization of capital investments, to concentrate them in the decisive areas as a result of reducing the number of facilities being constructed at the same time, and also to raise the technical level and increase the economic effectiveness of the plans. The ministries have temporarily closed down 193 construction projects or one-fifth of all the facilities under construction. The funds that were released were used for successful construction of startup projects for the 12th Five-Year Plan.

In order to eliminate the arrears, we are trying to carefully study and introduce the experience of the best construction organizations and we are conducting research on new organizational forms for construction work. Thus the USSR Council of Ministers envisioned in its instructions as an experiment providing for accelerated construction and creation of capacities at the Rzhev crane construction plant. Here it is intended to carry out the construction and installation work in parallel with the development of planning estimates. It is intended to reduce the overall time periods for the planning, construction, and assimilation of capacities by almost 40 months while the overall planned time period is 72 months.

Just as a result of reducing the time required for construction and starting up the capacities ahead of schedule the enterprise will be able to produce about 1,000 additional gantry cranes worth a total of 134 million rubles.

The work experience of the past 2 years of the five-year plan shows that we are in a position to provide for the fulfillment of the most difficult assignments. When visiting the exhibit entitled "Machine Building by the 70th Anniversary of Great October" M. S. Gorbachev gave a positive evaluation to the work done by the machine building complex during the past 2 years.

At the same time we have been given the task not only of reinforcing what has been achieved, but also adding significantly to the work. This pertains equally to the staff of the Machine Building Bureau of the USSR Council of Ministers and the staffs of machine building branches, production and scientific-production associations, enterprises and organizations of the complex.

The restructuring of the country's economic mechanism, the changeover to work according to principles of self-financing, and the beginning of the enforcement of the Law on the State Enterprise (Association) are a reliable and long-term basis for carrying out the tasks set for machine building by the party. And this pertains above all to solving the problem of bringing the machine building complex up to the highest level of world practice. The party emphasizes that there can be no deviations from the adopted program for modernization of machine of machine building or the state priorities that have been assigned to it.

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ROBOTICS

Scientists' Brigades Working in Kaunas Machine Tool Plant

18230033 Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 7 May 88 p 2

[Article by R Chesna; "Laser-Robot Begins to Work"

[Text] Integrated brigades of scientists are helping the Kaunas Machine Tool Building Association imeni F. Dzerzhinskiy to resolve current scientific-technical tasks more quickly and with greater efficiency. Yesterday at the enterprise a robot-technical complex came on line, developed by the scientists of the scientific-production association Litstankoproyekt and the Kaunas Polytechnical Institute. With its help, labor productivity in the manufacture of complicated parts for machine tools with NC grew two-fold.

Now six integrated brigades of scientists are working in the association, involved in operational introduction into production of systems with a high scientific level. Testing has already been completed on an automated complex operating according to the principle "laser-robot". Without the help of a person it fulfills boring, engraving, hardening and other operations 3-4 times more quickly than usual. A new method of vibration-pressure fitting has been introduced which automated this technological process and ensured high precision of the machines being assembled.

Thanks to the activity of the integrated brigades, the time for introduction into production of scientific systems has been shortened by 1/3 to 1/2.

CIVIL AVIATION

'Spektr' ATC System Tested at Pulkovo

18290082a Moscow GRAZHDANSKAYA AVIATSIYA in Russian No 1, Jan 88 pp23-27

[Article by T. Anodina, NETs AUVD [Scientific Experimental Center for Civil Aviation Air Traffic Control Automation] chief and doctor of technical sciences; V. Mokshanov, department chief and candidate of technical sciences; and O. Nazimov, sector chief: "The 'Spektr'System"]

[Text] One of the conditions for insuring the safety, regularity and economy of air shipments is improving air traffic control, especially the widespread use of automated control systems (AS UVD). A number of these systems have been developed in our country. During the last decade, 11 airdrome "Start" AS UVD, three airhub and one rayon "Terkas" AS UVD sets and a rayon "Trassa" AS UVD have been introduced; and tests of a new rayon system are underway. Our first domestic "Start" AS UVD has already been operating for more than 12 years at the Pulkovo airport. This system was the first in our country and has demonstrated in practice the advantages that the automation of air traffic control provides. In particular, the system's introduction permitted the load on the air traffic control staff to be reduced by 35-40 percent on the average, the capacity of the air space in the vicinity of the air drome to be increased by 25-30 percent on the average, and the number of the dispatcher staff to be reduced by a fifth on the average. Air traffic safety was increased in the vicinity of airdromes with a high flight intensity — there have been no dangerous approaches of aircraft during the entire period that the "Start" system has been operating. The automation of air traffic control has also permitted aviation fuel to be saved.

State testing of a test model of an airdrome (airhub) air traffic control automated system with an increased level of automation for air traffic control processes — the system is called "Spektr" (it had the name "Start-2" during its development) — were successfully completed during 1986 at the Pulkovo airport.

The system is designed for the collection, processing and display of information on the air situation (radar and planned) and weather data at the work positions of the air traffic controllers. It services the air space up to 12 kilometers in altitude and an area of up to 160,000 kilometers. "Spektr" is an effective facility for increasing the operational capabilities of the air traffic controller staff during air traffic control. In turn, this leads to an increase in flight safety and an increase in the capacity of the airdrome's (airhub's) rayons. The new system permits automated air traffic control to be carried out during all stages of an aircraft's flight in the air space of the airhub, including landing, take off and — partially — taxiing. It differs substantially from its predecessor, the "Start" AS UVD, in its improved and more complete processing of radar information and in the presence of subsystems for processing flight plans and meteorological information. It considerably exceeds "Start" in its instrument capacity and the volume of tasks being solved. "Spektr" has been built on a modern element base and improved computer equipment using advanced technologies.

The collection and processing of data is included in "Spektr's" functions: Coordinate information on the actual location of aircraft (according to primary and secondary radar station signals; in this regard, the information from both radar units is combined); information on flight plans; information arriving from the work positions of approach and circling air traffic controllers and the flight directors of the airhub's air traffic control center; and information from the work positions of the take-off position, taxiing and landing air traffic controllers in the airdrome's command and air traffic control point for the three airdromes in the air hub. In addition, the receipt, processing and transmission of information, which is circulating in the air record telecommunication network (planned and meteorological) take place; flight plan elements (so called "strips") are calculated and printed automatically; information on the actual and forecasted weather and the focal points of dangerous meteorological phenomena is processed and displayed; and data on air space restrictions are displayed. The identification of the coordinates of an aircraft with the help of an automatic radio direction finder, the documenting and reproducing of information on the air situation as well as vocal information transmitted on internal and external communications channels, the training of the air traffic controller staff on reserve panels, and the continuous functional and test monitoring of the equipment's servicability have been provided for in the "Spektr" system.

As a result of processing the diverse information, the system determines and warns the air traffic controllers about possible collision situations between aircraft crews and about their dropping below the minimum safe altitude. The task of automated control of the stream of arriving and departing aircraft in order to prevent the nonproductive expenditure of aviation fuel both during flights in the vicinity of the air drome and on the ground before take-off is being solved experimentally. In this connection, one of the most important questions is improving the air space structure and organizing air traffic control in the area in which the "Spektr" AS UVD is effective. Although the system can function in principle with any air space structure, its greatest effectiveness can be achieved with an optimal organization that provides for the presence of standard aircraft flight trajectories, separate corridors, holding areas outside the limits of the take-off and landing zones, and zones for correcting the final approach sequence (maneuvering).

An analysis of a version of the structure, which was conducted by NETs AUVD, was given in the article entitled "In the Vicinity of an Airdrome". (1) Such an air

space structure was implemented in the Leningrad airhub's air traffic controller region.

The analysis, which was done of the test results, showed that "Spektr" exceeds similar foreign systems based on the number and quality of control tasks being solved. Half-scale modeling of the ergatetic processes under conditions, which approximated real ones as much as possible, confirmed that the main output characteristics of the system (air space capacity, air traffic safety and economy, etc.) were 30-40 percent higher on the average than the characteristics of the "Start" system. In the new "Spektr" system, the information model of the air situation, which is displayed on the indicator, has been optimized for the first time in our domestic practices in accordance with the alignment probability maximum of the space for depicting information and the space of the air traffic controller's perception. In other words, the output characteristics of the air situation indicator have been mutually coordinated with the psychological and physiological characteristics of the air traffic controller. This provides more favorable conditions for his work.

A number of technical systems are included in the "Spektr" AS UVD. The "Skala-MPA" radar system is used for radio location and the relaying of radar data. A computer system and interfacing hardware based on the "Nairi-4S" computer and single-board microcomputers are provided for the processing of information. There are display devices and equipment for voice communications, the transmission of data, the control and monitoring of the work of the system's equipment, documentation, etc.

The electrical power supply system includes a constant electric power supply unit. The presence of special monitoring and testing equipment, which includes a stand for checking and adjusting boards and units, has been provided for.

Radar sets (up to two simultaneously), landing radars, the air record telecommunications network information switching center, the reception and transmitting center, the "Meteoyacheyka-S2" subsystem for processing meteorological information on focal points of dangerous meteorological phenomena, and integrated radiotechnical automatic weather stations (KRAMS, KRAMS-2) serve as the information sources in the automated "Spektr" air traffic control system.

The main equipment of the "Spektr" AS UVD is located at one airdrome in the airhub's air traffic control center building. The consoles of the approach and circling air traffic controllers, assistant air traffic controllers and flight supervisor are set up here. The movable equipment of the airdrome's command and traffic control point, whose composition includes the consoles of the take-off position, taxiing and landing flight controllers and airdrome flight supervisor as well as the tabular character displays, which are mounted at the work positions of the airdrome's flight control point traffic controllers and weather bureau and main observation point operators, are placed at the same airdrome. Another one-two airdromes, which are separated from the main one by a distance of up to 80 kilometers, can be equipped with mobile "Spektr" system equipment.

The console of the landing flight controller at the main airdrome can be placed in the hall of the airhub's flight control center or on the premises of the airdrome command and traffic control point next to the consoles of the take-off position controllers.

The consoles of the approach and circling flight controllers (these consoles are identical based on the composition of the equipment) consist of two sections — the radar control flight controller (on the left) and the procedure monitoring controller (on the right). An air situation display, a tabular character display, a "Poisk-20" information and reference display (for the operational displaying of one of 20 slides that contains any reference information pertaining to air traffic control), an ARP-75 electromechanical display, a device for printing "strips", internal and external radio and telephone communications systems, motherboards for inputting data, and elements for controlling the display conditions on the displays are located on the console.

The air situation displays can operate in three modes. In the analog mode azimuth and range labels and the aircraft's blip are displayed. In the synthetic mode, synthetic blips of the aircraft's location with tracking formulas, cartographic information, planning information in the form of landing and take-off lists, weather information, information on the position of centers of dangerous weather phenomena, the boundaries of flight restrictions in effect, information that warns the flight controller about an aircraft descending lower than the minimum safe altitude, the probability of a collision situation arising, etc., and additional character and graph system information are displayed. In the combined mode, analog and synthetic information are combined.

Lists of arriving and departing aircraft, flight plans, reports arriving and being transmitted over the channels of the recording electrical communications network, weather information from the main and alternate airdromes, and additional information are displayed on the tabular character display.

The actuation and control of the system's operation is, generally speaking, carried out from the technical control and monitoring panel. Complete monitoring of all of the units and subsystems in the AS UVD, including the sources of information, communications channels and flight controller consoles, is carried out from this console.

The "Spektr" AS UVD computer set was built using a "Nairi-4S" two-processor computer. In addition, single-board microcomputers, including the equipment of the

so-called "radar point" that provides the flight controllers with the required information when the main computer complex is not working, are widely used in the individual functional modules of the system's equipment.

The construction of the system, which uses the modular principle, permits automated systems of different capacities and productivity to be designed based on the functional units of the "Spektr" AS UVD. This can be done not only for the vicinity of airdromes but also for rayon centers, forming a so- called integrated rayon-airdrome AS UVD.

A series of work, aimed at improving the system's functioning effectiveness, was carried out during the testing process of the "Spektr" AS UVD. For example, algorithms for solving tasks connected with warning a flight controller about a possible violation of the minimum during an aircraft's approach for a landing and for processing planning information for certain special flights were developed and implemented. The tasks in documenting information, which is displayed at the flight controllers' work positions, were firmed up and mastered. A series of system adaptation work, which was connected with defining the air space structure more precisely and organizing air traffic control was carried out.

The introduction of the new "Spektr" system is being planned also at other airdromes. It is evident that a number of specific problems remain to be solved during this period. In our opinion, it is necessary to pay attention to certain characteristic features of the system. First of all, there is the availability of periphery equipment that is mounted at the command flight control and air traffic control points, the weather bureau and the main observation point of the base and associated airdromes. The appropriate premises are required for its emplacement. Next, the timely solution of questions concerning the construction of the system's items, which are not included directly in its composition, for example, the radar station for scanning the air field, the subsystems for meteorological support and for mating with the communications switching center, etc., is required. It is necessary to provide premises not only for the location of the equipment and the work of the duty shift personnel but also for the active rest and psychological relief of the air traffic controller staff.

Operating tests of the system are presently being conducted at the Pulkovo airport. Criticisms are being eliminated, and the recommendations of the state testing act are being implemented. The construction of the airdrome command and flight control point tower, where the take-off position and taxiing flight controller panels must be installed, is being completed. The air traffic control and engineer technical staff of the aviation enterprise's airhub flight control center has begun independent operation of the AS UVD.

Footnote

1. GRAZHDANSKAYA AVIATSIYA, No 1, 1987

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08802

TU-154 Makes Emergency Landing

18290082b Moscow PRAVDA in Russian 11 Feb 88 p 6

[Article by O. Latifi, PRAVDA correspondent: "Why Did the Airplane Circle?"; first paragraph is PRAVDA introduction]

[Text] Dushanbe, 10 February—Many of those who had come to see someone off patiently awaited the take-off. When the TU-154 — having shattered the frozen night sky with a roar — flew upwards, everyone drifted away. The airplane, however, circled and circled over Dushanbe with a lowered landing gear, which could not be retracted in any way. It was in the intermediate position.

The entire command and director staff of the Tajik Administration of Civil Aviation rose to their feet. Yu. Krinevskiy, the administration chief, and A. Shukurov, the director of the hydrometeorology service, rushed to the airport. Every service had been made ready for action. The firemen and "first aid" were on duty near the runway.

A staff, headed by Minister of Civil Aviation A. Volkov, began to function in Moscow. In the Design Bureau imeni Tupolev, A. Sheyngardt, the deputy general designer, assembled specialists and analyzed what had happened in the sky over Dushanbe using the example of similar situations. Accurate recommendations on how to act were worked out.

Meanwhile, V. Giro, the aircraft commander, was in constant communications; he asked questions and received advice from Dushanbe, Moscow and the design bureau. The decision was as follows: to exhaust fuel as rapidly as possible in order to reduce weight and to land. What would happen with one landing gear? They puzzled over this. The time dragged on for an extremely long period. They played music in the cabin. They began to serve dinner. The passengers suspected nothing. They looked at their watches. It was already time to have landed at Domodedovo. Having turned the control wheel over to A. Rakhimov, the copilot, V. Giro went to the passengers. He told them about the situation. He said: "There is nothing to be afraid of." Then, he reported to the ground: "They believe me. This gives one strength." At the airport, everything was ready to receive the aircraft that was in trouble. The firemen covered the runway with foam. And soon, dispersing it, the enormous TU-154 touched down on the concrete.

A total of 2,600 meters were left far behind. What the crew expected, happened: The plane veered to the right and went off the runway. It tore up the frozen ground with one landing gear. Finally, it froze. In truth, 167 passengers and crew had been born with a silver spoon in their mouth. Another two meters and, as they say, God forbid.... There, to the front, was a cement fence; and behind it — a ditch.

The passengers applauded the crew for the excellent landing. The doors and emergency exits were immediately flung open. Everyone began to exit quickly. No one received a single scratch. In the waiting room, they were again invited to emplane. Five refused the flight. The others flew to Moscow on another TU-154 two and a half hours later.

Hundreds of aviators, firemen, doctors, policemen, and party and economic workers lived through the anxious night.

I am walking to the far end of the airport. The airplane is like a wounded bird: The fairly well mutilated right wing is already on a trailer. The Flight Safety of Civil Aviation Commission (it was at its post during the night) will find out the cause of what happened.

08802

RAIL SYSTEMS

Specific Responsibilities of Ministry Leadership Detailed

18290093 Moscow GUDOK in Russian 13 Apr 88 p 2

[Interview with Aleksandr Mikhaylovich Vaygel, chief of the department for improving the organizational structure of the Ministry of Railways, by a GUDOK correspondent; date and place of interview not given; first two paragraphs are GUDOK introduction]

[Text] In connection with the structural reorganization of the Ministry of Railways staff, letters requesting that we tell about which of the Ministry of Railway directors and what questions are circulating, are arriving at the editorial board.

Order No 21Ts "On Distributing Duties Between the Ministry, Deputy Ministers and Collegium Members" was recently signed. The purpose of the redistribution is to increase the personal and collegial responsibility of the Ministry of Railways staff for implementing the Law on a State Enterprise; pursuing a progressive scientific, technical and investment policy in transport; increasing the profitability and lucrativeness of passenger and freight shipments; etc. Our correspondent asked A. Vaygel, chief of the department for improving the organizational structure of the Ministry of Railways, to talk about this in detail.

[Question] First of all, Aleksandr Mikhaylovich, the question arises: How has the shift to the new management methods affected the change in the functions of the ministry's leadership?

[Answer] The responsibility and scope of work of the ministry directors are growing considerably under the new conditions which involve a sharp decrease in the size of the central staff. A more thorough than before and more detailed study of all factors is required when making decisions. An effective and, along with this, a scrupulous analysis of consequences and of the final results achieved is required. The unity of efforts to solve common transport and common national economic tasks is acquiring special importance.

The range of responsibilities of ministry directors has been outlined with a consideration for their personal qualities, experience, professional knowledge, and skills. The entire activity of the branch's staff can be arbitrarily divided into two large groups.

First Deputy Minister V. N. Ginko heads one of them. The range of questions connected with the economic and management activity of the ministry is under his jurisdiction. Current and long-range plans for the economic and social development of the branch, and the State Program for the Technical Reequipping and Modernization of Railroads During 1991-2000 are being developed under his immediate direction. He has been given responsibility for balancing plans and forecasts, expanding the level of transport, effectively linking it with the country's national economic complexes, and enlivening foreign economic activity.

V. N. Ginko is chairman of the commission for saving fuel and energy resources, a permanently operating economic commission, and chairman of the Ministry of Railways Scientific and Technical Council. The Economic Main Administration, Passenger and Railroad Restaurants main administrations and the Statistics Administration are directly subordinate to him.

The entire complex of questions connected with the management of shipments is under the jurisdiction of First Deputy Minister G. M. Fadayev. He heads the permanently operating commissions regarding Technical Operating Rules and Fuel Shipments. The Shipments, Container Transport and Commercial Work and Industrial Railroad Transport main administrations and the Armed Security Administration are directly subordinate to him.

An important concern of his is the planned and purposeful development of enterprise stations and sidings and the building up and rational use of railcar processing capabilities. The range of operational questions is wide. The introduction of new technologies, including the broadest computerization of shipment regulation and the insuring of traffic safety is under his trusteeship.

[Question] So far our talk has concerned general management. What is new in the management of the subbranches of our transport? Which of our deputy ministers will be in charge of what specifically?

[Answer] Deputy Minister V. D. Nikiforov has been entrusted with the development of the subways and the maintenance of the freight car, locomotive and motorcoach rolling stock. It is now very important to direct the collectives of scientists and designers toward the development of new types of rolling stock, power supply systems and technological processes. Transport needs technical systems which not only do not yield to but also exceed the best world models based on their characteristics and dependability. The range of questions relating to subways is wide. As is known, programs have been adopted for the accelerated commissioning of new lines in large cities and the modernization of existing lines. One must see to it that the programs are successfully and efficiently implemented. A difficult mission has been placed on V. D. Nikiforov. He faces the task of achieving a radical improvement in the work and rest conditions of locomotive crews. The Locomotives and Railcars main administrations as well as the Electrification and Subways main administrations are directly subordinate to him.

[Question] I think that these main administrations are primarily connected with equipment. However, the problems of technical progress in transport require an integrated solution. Who will engage in this?

[Answer] It is difficult to overestimate the importance of the accelerated introduction of the achievements of scientific and technical progress into rail transport. As a result of mechanizing labor and of automating and using robots in technological processes, we are faced with conducting the second stage in the reduction of workers (approximately 300,000 people). Deputy Minister V. S. Arkatov has been entrusted with directing the solution of the problems connected with this. The Soyuzzheldoravtomatizatsiya [All-Union Railroad Automation] Scientific and Production Association, which was recently formed in Moscow, is under his trusteeship. V. S. Arkatov is in charge of the Scientific and Technical Main Administration; the Signals, Communications and Computer Equipment Main Administration; the All-Union Scientific Research Institute of Railroad Transport; and the Central Scientific Research Institute Technical-Economic Surveying and Designing Institute.

[Question] The development of the branch urgently requires an increase in the rates of capital construction. Who has been placed at the head of this important task?

[Answer] Deputy Minister N. K. Isingarin manages the set of questions connected with investment policy and capital construction. Such important social questions as the construction of housing and domestic installations for railroad workers and their families are under his jurisdiction. He will maintain the closest ties with the Ministry of Transport Construction and concern himself with the development of our own railroad construction organizations and their production base. The Lines, Design and Capital Construction and the Economics main administrations are directly subordinate to him. He has been given responsibility for the construction of BAM [Baykal- Amur Mainline] and other very important rail lines and installations.

[Question] International cooperation in the transport area is now being rapidly expanded. Which deputy minister has received this important work sector?

[Answer] Deputy Minister V. N. Butko. His work is aimed at expanding the Ministry of Railways' international relations in every way possible and at developing progressive forms for foreign economic cooperation with foreign countries, especially CEMA members. It is important to achieve an increase in currency receipts and to make the foreign economic activity of the Ministry of Railways one of the channels for strengthening the economics of Soviet transport. The selection and extension of highly efficient foreign technologies is of no lesser interest for the branch.

[Question] The training and placement of personnel, the raising of their qualifications, and social policy have always been under the jurisdiction of the deputy minister for personnel. Who now handles this acute question?

[Answer] L. I. Pingarev is deputy minister for personnel. Besides the Personnel and Educational Institutions Main Administration, the Medical and Sanitation and Workers Supply main administrations are under his jurisdiction.

[Question] GUDOK recently reported the appointment of another deputy minister — G. I. Kozlov, the chief of the Traffic Safety Main Administration. He is faced with solving complicated tasks....

[Answer] Without a doubt, the situation regarding traffic safety is extremely alarming. A clear-cut system for preventing various violations, which can lead to trouble, is required. The entire control and inspector staff, is essentially being made over and updated and the activity of the public is being intensified. There is indeed a wealth of work here.

[Question] One other question: How are the functions of the directors changing in connection with the introduction of cost accounting?

[Answer] Let us look, for example, at how the duties of a deputy minister — A. Ya. Sidenko, the chief of the Shipments Main Administration — are formulated in the minister's order. He manages the shipping process, seeing to it that the maximum profit is obtained. To do this, it is necessary that the traffic schedule be strictly

observed, the prescribed transfer dimensions be persistently carried out, and the transport of local freight be arranged well. It is important to consider the economic factor in each operational decision.

A new content fills the functions of G. M. Korenko, a deputy minister and chief of the Material and Technical Supply Main Administration. Besides purely supply matters, he has been entrusted with setting wholesale trade going in the branch. As is known, this is an important component of the new management mechanism. The Plant Main Administration has been transferred to G. M. Korenko's jurisdiction. He heads the work to expand the service area and produce consumer goods in transport.

The range of duties of Ministry of Railways directors is extremely broad. The deputy ministers and Collegium members have responsibility for implementing the propositions in the USSR Law on a State Enterprise (Association) with a consideration for the distinctive features of its applicability to the branch.

08802

Traffic Safety Conferences Examine Rail Accidents

18290092 Moscow GUDOK in Russian 6 Apr 88 p 1

["Guarantee Accident-Free Operation: Improving the Traffic Safety Administration System"—GUDOK headline]

[Text] Two selective meetings devoted to one question — traffic safety — were held at the very end of March in the Ministry of Railways during an interval of three days. One has rarely seen such attention paid to this aspect of the life of transport workers: The accident rate situation is now extremely inauspicious. After the very serious wrecks of last year and the year before last, the railroad workers have still not been able to correct their seriously shaken reputation.

A recent meeting in the CPSU Central Committee, which examined traffic safety questions on all types of transport, posed specific tasks and outlined ways to correct the situation.

Nevertheless, a sudden change in the organization of safety work on the railroads did not occur during March. Ten wrecks, two serious accidents and hundreds of cases of waste — this result cannot satisfy anyone. It is typical that accidents occur on one and the same railroads and in one and the same branches of the economy for well known reasons.

The Azerbaijan Railroad. During the first 10 days of February, two accidents involving passenger trains occurred here because of the lack of repairs to the track. On 7 March, 18 freight train cars derailed on the Siazan-Zorat line of the Baku division because of a break in the rails. Five cars of the Baku- Tbilisi passenger train also derailed because of a break in the rails. What are they doing here regarding track facilities? Are all of the track replacement periods being exceeded? No, the trouble lies elsewhere.

The rail, which broke on 7 March, was of the R65 type. It was laid only the year before last. An inspection of the wreck's location revealed much: The overhaul, which PMS-144 [Track Machine Station-144] carried out in 1986, was done according to the "slipshod" principle. The new sleeper lattices were not placed at the proper distances when they were laid; the distance between them exceeded 1 meter (!) in many places. There was almost no crushed-stone ballast under the sleepers — the weight lay on the ends. Of course, mismatches, angles in the plane, and splashing appeared during the operation of this track. The Khachmas division workers did not take a hand in correcting the sloppy work of the PMS.

Things have been no better with the track workers on a number of other railroads. Half of the 10 wrecks were due to the fault of workers on these facilities. The Southeastern, Kuybyshev, October, Baltic, and Alma-Ata railroads — these are the addresses of the track workers who violate traffic safety requirements. Each instance represents someone's callousness, lack of concern and indifference.

Three wrecks occurred because of railcar workers. A chain of callousness, through which a "sick" railcar whirls along to an accident, is being formed here. Here is only one typical case.

A freight train wreck occurred on 4 February on the Kurgan Division of the South Urals Railroad. A total of 15 cars loaded with coal derailed. An investigation determined that the source of this accident was a thousand kilometers away — at the Ekibastuz PTO [Technical Maintenance Point]. They had loaded the gondola car here. Although it was built in 1986, the bogie under it was of the simplified TsNIIKh-3 type and had been built in 1982. This car would carry a load of only 67 tons. They loaded 76 tons in it at Ekibastuz. The Kurgan PTO overlooked the violation and — as a result — a wreck.

During this time frame, two wrecks occurred due to the fault of the locomotive crew. Passing through a stop signal is an old scourge that has already brought a great deal of unpleasantness and which continues to lash safety painfully. It has again led to an accident on the Odessa Railroad.

The continuing cases of waste, accidents and wrecks require that the struggle against accidents be organized in a new way.

The 31 March selective conference announced a radical improvement in rail transport's traffic safety structure and system. At the end of last year, a Traffic Safety Main Administration was formed in the Ministry of Railways.

It is now accurately oriented toward a thorough and comprehensive analysis of the reasons for accidents, the revealing of bottlenecks, and the development and carrying out of measures to eliminate and prevent them.

Here is a new and important step in improving the effectiveness of the system struggling for traffic safety. In order to strengthen the railroads' main inspector staff, the establishment of supplrmental worker groups to analyze and study the reasons for accidents in a qualified manner and to develop actual measures for combating them, has been recommended.

Railroad divisions are introducing the positions of track repair quality examiners. The locomotive and railcar examiners are not subordinate to the directors of the corresponding enterprises but are transferred to the staff of the divisions. They will be subordinate to the chief inspector of the division.

The responsibility of the primary directors of the railroads, divisions and main administrations for the condition of traffic safety is being increased. Railroad and main administration chiefs will now participate in the investigation of each serious case.

In the near future, a large detachment of experienced and respected specialists will be included in the struggle against accidents. Under the conditions of widespread glasnost, it is important to set out a strong covering detachment against bureaucratic work methods and to achieve a real improvement in the condition of traffic safety.

The CPSU Central Committee is demanding an increase in the activity of party committees in transport enterprises and subunits and is requiring persistent and purposeful work so that accident-free operation will be effectively guaranteed on the links in the gigantic transport conveyer belt.

08802

Prospects for Rail Transport Future Discussed

Moscow ZHELEZNODOROZHNYY TRANSPORT in Russian No 10, Oct 87 pp 4-6

[Lead article: "Railroad Transport: Stages on a Long Journey"]

[Excerpt] At the present stage, the development of the network of railroads is characterized by their advance into the remote regions of the country, increasingly complex with respect to natural conditions. The Tyumen-Surgut-Nizhnevartovsk roads have connected the existing network with the oil and gas regions of Western Siberia. The branch from it to Urengoy is in temporary operation, and construction of the Urnegoy-Yamburg line, which comes out at the port on the shore of the Ob bay, is being completed. Rails have been laid along the entire length of the Baykal-Amur mainline—the greatest construction project of our time. Construction workers have begun building the Amur-Yakutsk mainline and the Yamal road, i.e., lines going to the country's northern storehouses.

Technical re-equipment has touched on all the sectors of railroad transport. Along with expanding the railroad network, developing initiative and improving socialist competition, it has contributed to a considerable rise in the efficiency of the transport process. Fitting out the steel mainlines with new equipment and introducing advanced technology has been accompanied by an improvement in the administrative structure. The roads and enterprises have been consolidated.

Today, USSR railroad transport is one of the major sectors of the socialist economic system, with the highest line freight intensity and intensiveness of rolling stock use in the world. It has a powerful scientific-production potential, a well developed material-technical base and experienced, highly skilled and innovative personnel. Almost 9 percent of the cost of the country's fixed capital goes to the railroad. The complex multisectorial railroad business includes 32 railroads, 179 road branches, over 7000 stations, and a considerable number of varied production enterprises. The subways are the particular pride of the Soviet people. This is the largest mass and express type of municipal transport. The transport problems of major world cities are being successfully solved by means of subways.

Our steel mainlines, with a total extent of about 145,000 kilometers, perform over 65 percent of the internal freight turnover and 45 percent of the international and suburban transport. They send off over 11 million tons of national economic goods and 11.4 million passengers, and the subways carry over 11 million persons.

Because of its all-purpose nature, reliability, ability to function in all the climatic belts at all times of year and technical-economic advantages, ensuring regularity and low cost for transport and high speed freight delivery, railroad transport is the basic form of transport in our country. And henceforth, in the foreseeable future, it will maintain its leading role in the transport system.

The depression in the development of the national economy that appeared in the 1970's to the beginning of the 1980's also occurred in railroad transport. Serious shortcomings appeared in its work, and some of them were the result of planning miscalculations. Therefore, it is not by chance that railroad transport was subjected to sharp criticism in principle for unsatisfactory work at the November (1982) Plenum of the CPSU Central Committee.

During 1983-1987, decisive measures were adopted by the management of the Ministry of Railroads and on the line to reinforce planning, technological and performance discipline, eliminate losses and increase efficiency in the use of technical resources. As a result, they

succeeded in considerably improving the operations activity, making up for transport liabilities and bringing railroad work up to the level of the planned indicators.

Under today's conditions of national economic development, new, heightened demands are imposed on railroad transport. The party has set the task of ensuring acceleration and restructuring in all spheres of our economic system. Therefore, the efforts of the railroad workers are now directed toward a radical change in methods of economic activities, removing bottlenecks and eliminating the disproportions that had formed in the development of individual units. On this basis, a considerable increase is ensured in the throughput, carrying and processing capacity of the network. The resolution of the CPSU Central Committee and the USSR Council of Ministers, adopted in May 1986, on measures for further improvement in the work and reinforcement of the material-technical base of railroad transport in 1986-1990 is also directed toward this.

After the April (1985) CPSU Central Committee Plenum, railroad transport entered a qualitatively new stage of development. Strategic concepts of restructuring in the sector were worked out on the basis of the plenum's decisions. Their consistent realization ensured fulfillment of the assignments of the 11th Five-Year Plan and made it possible to develop a good underway project for a successful resolution of the crucial new tasks facing railroad workers in the 12th Five-Year plan.

The 12th Five-Year Plan is a crucial stage in carrying out the strategic plans for the development of the country's economic system. It should also become a turning point in the technical re-equipment of railroad transport, its transition to the rails of intensification, a rise in the quality and efficiency of transport and acceleration of the rates of economic and social development. The railroad workers are to increase the volume of freight transports by 8-10% and of passengers—by 7-9%. Delivery of freight in containers and packeted form should increase by a factor of 1.4-1.5. Some 2700 kilometers of new railroad lines are slated to be put into operation, at least 4000 kilometers of secondary tracks are to be constructed and 8000 kilometers of steel mainlines to be electrified. Raising the productivity of locomotives and other rolling stock, accelerating the car turnover, increasing the amount of traffic on a number of sections and building up the weight of the freight trains require particular attention.

Specific milestones in the most important indicators of railroad operations activity have been determined. For example, by the end of the five-year plan the volume of freight shipment should reach 11,780,000 tons a day, loading should go to a level of 217,000, and unloading—219,000 cars a day.

The country has emerged at a new, critical period of restructuring. The June (1987) CPSU Central Committee Plenum adopted a program of radical reform of the economic system. Its essence is a transition at all levels from mainly administrative to economic methods of management and to broad democratization of management and utmost activation of the human factor. The course toward expanding the economic independence of enterprises, intensifying the democratic principles in their work and increasing the responsibility of work collectives for production and social development is opening up wide possibilities for socialist enterprise, the growth of production efficiency and a rise in product quality. New methods of management by the economic system are based on developing the social and production sphere through the enterprises' own resources, and this requires the acceleration of scientific-technical progress, mobilization of all reserves and carrying out a purposeful personnel policy.

Immediately after the April (1985) CPSU Central Committee Plenum, economic methods of business activity began to be introduced at the steel main lines. The universal dissemination of the widescale experiment of the Belorussian railroad workers made possible a several-fold increase in the labor productivity growth rates in the sector and a wage increase of almost 2.8 million for workers on the steel mainlines. The experience of the Dnepr and Southwestern roads in introducing new methods of management contributed to the network's conversion to work under the new economic conditions. A corresponding experiment has been in progress on the Belorussian road since January 1987 in order to finish working out the principal premises and amass experience in converting to full cost accounting and self-financing.

Beginning in January 1988, the entire sector will convert to full cost accounting and self-financing. Economic methods of operation will take effect in full force, and will inevitably require a rise in profitability, a stricter regimen of economy and elimination of all types of losses. The final goal of these transformations is to broaden the independence of production collectives, increase their interest and responsibility for the highest end results and ensure the direct relation of incomes to work efficiency.

The Law on the State Enterprise (Association) should form the basis of all this. At the same time, it must not be forgotten that railroad transport is a unified centralized system. It is difficult to imagine the activities of any railroad or department detached from the entire network.

The main task of the first stage of fundamental reform of the economic mechanism in railroad transport is the formation of a plan of economic and social development for 1988. It should absorb the principles of the new conditions of economic operations, take into maximum consideration the requirements connected with the sector's transition to full cost accounting and self-financing and be based on the premises of the Law on the State Enterprise (Association).

Conversion of the sector's enterprises to full cost accounting is being implemented during the approved, prevailing five-year plan. Therefore, the yearly plans should be constructed on the basis of the indicators of the five-year plan and the economic norms established for these years which are assigned a decisive role in planning.

Passenger conveyance is a subject of particular concern and attention for all transport workers. It is the chief unit of the transport service system for the population. The average train in our country carries about 3.5 billion passengers a year. Our first duty is to create maximum convenience for them and give them exemplary service at the stations and en route.

Slated for the 12th Five-Year Plan are constructing and modernizing 370 stations, putting into operation subways in Sverdlovsk, Kuybyshev and Dnepropetrovsk and continuing to expand all the presently operating subways. Construction of subways in Alma-Ata, Riga, Omsk, Chelyabinsk and Krasnoyarsk will begin.

Passenger traffic is a special sphere of activity for railroad workers. This is an extremely crucial matter. The soviet people and foreign visitors judge the entire railroad transport operation by the level of passenger conveyance organization and the standard of service. For a number of objective and subjective reasons, however, passenger service still lags considerably behind today's requirements. There is still a great deal to be done with respect to improving passenger service, particularly in organizing ticket sales and expanding the services offered.

The methods of solving social problems are being radically changed. A basic source here is the fund for social development of the collective, over half of which is directed toward the construction of housing, hospitals, schools, boarding houses, etc. In addition about a quarter-billion rubles are allotted from the budget for these purposes. The work collectives of railroads, enterprises and organizations have been granted the right to direct part of the fund for production development toward housing construction and part of the material incentive fund toward construction of objects for nonproduction purposes and taking out bank loans. Such broad rights open up additional possibilities for successful fulfillment of the construction program, slated by the ministry in this five-year period, of 200,000 apartments.

Socialist competition—a tested means of augmenting work progress and achieving highest labor productivity—has been successfully organized. The foundation of its entire organization is formed by socialist commitments. Accumulating all the best, the advanced, they are the creative force that will set production in motion. At the same time, the commitments should be realistic, free from any manifestations of formalism.

Carrying out the program of scientific-technical progress of the CEMA member countries up to the year 2000 deserves particular attention. It specifies the steady growth of foreign trade freight transport.

Strengthening and expanding foreign activity is a characteristic sign of an active international policy for the sector. At the same time, it is necessary, in a very short time, to overcome the shortcomintgs in the organization of international shipments that are connected with train delays at the border, violations of their movement schedule and failures in the planning of export-import shipments and in the work of the border stations.

The jubilee year is approaching completion, and today the top-priority task of the sector is to ensure on-time and uninterrupted delivery of the entire products list of goods to all the consumers. Creating winter fuel reserves at enterprises and electric power plants requires particular attention. The efforts of the railroad workers should be concentrated on fulfilling the plans for 1987 and the socialist commitments for the year and providing a sound foundation for successful completion of the goals of the 12th Five-Year Plan.

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