C. GORBACHEV ON SCIENTIFIC AND TECHNICAL PROGRESS

Conference Speech on "The Fundamental Issue of the Party's Economic Policy"

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SWB

Text of recording of speech, with insertions in square brackets from the home service (announcer-read - 1200 gmt) and Tass (in Russian for abroad 1230 and in English 1120 gmt):

A conference on matters concerning the acceleration of scientific and technical progress opened at the CPSU Central Committee today. Taking part in the work of the conference are Comrades Gorbachev, Aliyev, Vorotnikov, Grishin, Gromyko, Kunayev, Ligachev, Ryzhkov, Solomentsev, Tikhonov, Chebrikov, Shcherbitskiy, Demichev, Dolgikh, Kuznetsov, Ponomarev, Sokolov, Shevardnadze, Zimyanin, Kapitonov, Nikonov and Rusakov; and secretaries of the central committees of the communist parties of the union republics, and of kray and oblast Party Committees, ministers and chairmen of state committees, well-known scientists, leaders and chief specialists of associations, enterprises, building organisations, collective and state farms, scientific research and planning institutes, front-ranking workers and collective farmers and production innovators.

[Ligachev] Comrades, permit me to invite Comrade Gorbachev, Mikhail Sergeyevich, General Secretary of the Central Committee of the Party, to take the floor to deliver his report: [applause]

[Gorbachev] Comrades, all of you know with what approval the resolutions of the April plenum of the Central Committee of the Party and the programme it put forward for speeding up the country's social and economic development have been received in our Party and amongst the broad strata of the people. Testimony of this is provided by the results of the plenums of Party committees and by the numerous responses that are reaching the central organisations. Soviet people welcome the open and truthful discussion of problems that have become ripe in society and completely approve and support the course of being more demanding, introducing order everywhere and resolutely improving methods of economic management. They respond to it with practical deeds. The successful fulfilment of the tasks of the plan for May is clear evidence of this. A good, business-like atmosphere is taking shape in party organisations, in labour collectives and in the country as a whole. The Politburo of the Central Committee values highly the confidence of the working people in the policy of the CPSU. But support is also a kind of credit: it places us under an obligation to consolidate what has been achieved and go further, evaluating soberly both the favourable changes and also the importance of the things that lie ahead. Nor can one fail to mention the anxiety of Soviet people: Supposing the work which has been started turned out in the end to be no more than yet another campaign? In this connection critical observations are being made against all Party organisations and leading officials who take up an inactive position and exert themselves too slowly; those who are incapable of rousing and uniting people, of mobilising them for the solution of the great and responsible tasks of the present stage in the development of society.

I will say this: everyone, from the Central Committee to the primary organisation, bears full responsibility before the Party and the people for the consistent implementation of the line of the April plenum of the Central Committee. [Relying upon the experience of socialist construction, the achievements of the Soviet economy and the scientific elaboration of the long-term strategy of the CPSU, the April plenum formulated the concept of accelerating the country's socio-economic development on the basis of scientific and technical progress.] The Party views the acceleration of scientific and technical progress as the main direction of its economic strategy, as the main lever for

the intensification of the national economy and for raising its efficiency; and hence for the solution of all other economic and social issues. These tasks are so pressing that action has to be taken without losing any time. They embrace a wide range of current and long-term problems - economic, organisational and social and concerning the development of culture and education, the activity of the upper echelons of management and of every link in the national economy. They affect every collective, every communist and every Soviet citizen.

The decision of the Politburo to hold the present conference on the threshold of the 27th CPSU Congress was brought about precisely by this. Problems of accelerating scientific and technical progress must be placed at the centre of the pre-congress report-back and election campaign, and of the whole of the Party's political, organisational and educational work. The attention of state and economic organs and of the whole people must be fixed on it. I would like to invite you to take part in a most candid discussion of the real state of affairs and the things that are putting a brake on our development, and the main issue - of ways and reserves for speeding up scientific and technical progress and the growth of the Soviet economy.

Comrades, in putting forward the task of accelerating social and economic development, the Central Committee has in mind not simply raising the rate of growth of the national economy. It is a question of a new quality of growth, of putting development on to an intensive track, of rapid progress in strategically important directions, of the structural reorganisation of production, the use of efficient forms of management, the organisation of labour and the provision of incentives for it, and the fuller solution of social problems. What has brought about this task?

The need to speed up social and economic development is determined primarily by our internal requirements. The Soviet economy has always been characterised by a high level of dynamism. Since 1950 national income has risen by nearly 10 times. Over a period of three and a half decades, thousands of major enterprises have been built and the appearance of towns and villages has changed; the level of culture, of education and public health has risen considerably. Much has been done in the improvement of housing, of cultural and domestic conditions and of the overall material well-being of the people. Real incomes per head of population have increased five-fold. In all this the enormous advantages of socialism and of its planned economy have made themselves clearly manifest. Our successes are indisputable. They are generally recognised.

At the same time one cannot fail to see the other side of the coin. [However one cannot fail to see that since the early 1970s certain difficulties began to be felt in economic development. The main reason is that we did not display in time perseverance in reshaping structural policy, the forms and methods of management and the very psychology of economic activity.] Our Party and the whole people have been faced with the task of overcoming negative tendencies and with bringing about a sharp turn for the better. Any other approach is ruled out politically for us. We cannot embark upon a path of winding up social programmes and defence measures. Society is faced with urgent tasks in the areas of food supplies and production of goods and services for the people. It is important to continue to build housing on a wide scale, and to improve the amenities of the towns and villages. We are under an obligation to do all that is necessary to improve further the protection of people's health and physical training. The innovating and path-blazing role of socialism in the development of education, science, culture and art must be intensified.

The need to speed up social and economic development is brought about by serious external circumstances. We cannot fail to take into consideration the fact that the USA is carrying out a strategy towards total American superiority.

The main reason - and it was mentioned quite definitely at the April plenum of the CPSU Central Committee - amounts to this, that a proper assessment has not been given to radical change in the economic situation. The necessary persistence in readjusting structural policy, the forms and methods of management, and the very psychology of economic activity, has not been displayed. For many years there has been

talk of shifting the centre of gravity to intensive factors of economic growth; but the measures adopted were half-measures, inconsistent measures, and were not implemented to the full. And, thanks to inertia, the economy continued to develop mostly on an extensive basis. [Note: See earlier insertion from the home service and Tass, referring to "the 1970s"]

The situation is complicated by the fact that we are compelled to invest immense [the necessary] funds into defence. The achievement of strategic military parity with the USA was an historic gain. We shall continue to make the maximum effort to end the arms race and shift matters towards reciprocal disarmament and curtailing military spending. But, faced with the aggressive policy and threats of imperialism, it is essential that we persistently strengthen the country's defence power and do not permit military superiority to be achieved over us. Such is the firm resolve of the Soviet people. [applause]

Vladimir Ilyich Lenin's statement that socialism would exert its greatest influence on the world about it by its economic policy and its socio-economic achievements is well known. In the eyes of the progressive world public, the Soviet Union has been and remains the embodiment of people's age-old social hopes. It should also be an example of supreme organisation and efficiency in its economy, a pillar for the progressive forces of the planet. And finally, the need to accelerate our development is demanded by the requirement to ensure the Soviet state's complete economic independence of the capitalist countries, above all in the strategically important directions.

We are not propounding self-sufficiency. The mutually beneficial international division of labour, above all within the system of the socialist community, is one of the real paths towards heightening production efficiency. But we cannot permit our country to depend upon deliveries of Western output. The experience of recent years has taught us a great deal.

Thus, the task of speeding up the country's development has today acquired paramount political, economic and social significance. Before us lies the implementation of the new technological reconstruction of the national economy, and the qualitative transformation of the material and technical basis of society. The resolution of this problem is an urgent matter, and one for the Party and all the people; and this must be done in a very brief period of history, guaranteeing that the country reaches the frontiers of labour productivity and economic efficiency.

We can implement what is outlined only on the path of intensifying production and speeding up scientific and technical progress. The topicality of the problem is further enhanced by the fact that a new stage of the scientific and technical revolution, ensuring a multiple increase in labour productivity, huge savings of resources and an improvement in the quality of output is beginning. Figuratively speaking, we too must saddle scientific and technical progress.

There is simply no other way, if we add to this the fact that we have, fundamentally, exhausted the extensive methods of development. Calculations show that if we continue to guarantee the planned growth in the national income on the previous basis, which is to a substantial degree extensive, it will be necessary to increase output of fuel and raw materials by 10-15% in each five-year plan, the volume of capital investment by 30-40%, and engage an extra 8-10,000,000 people in the national economy.

But we simply do not have such possibilities. And there is no need for it. For the so-called deficit is the result of our extensive methods of growth. Strictly speaking in terms of resources, our country remains the best provided for. It is important to husband them thriftily.

Today, when the Party is advancing towards the 27th CPSU Congress and the congress programme documents are being prepared, it is imporant to take account of the fact that we cannot do without the acceleration of scientific and technical progress

and without revolutionary changes in the intensification of the economy. And for this reason all these documents - and, first and foremost, the Guidelines for the economic and social development of the country in the 12th Five-Year Plan and up to the year 2000 - must contain fresh approaches which provide a sharp turn-around towards intensification and the energetic pace of scientific and technical progress.

The Politburo of the Central Committee recently discussed the draft Guidelines and, on the whole, it supported the signposts and targets mapped out in them. But serious observations were expressed which require the revision of the draft. It has not yet been possible to include measures in it providing for the transition to a course of chiefly intensive growth by a number of industries, deepen the structural rebuilding of the economy, attain the necessary concentration of capital investment in the priority areas for the development of the national economy and to balance all indices. Work on the draft must be continued by the State Planning Committee, ministries, union republics, production associations and enterprises. They are being notified of the planned figures for the Guidelines. The targets which are being outlined for raising the efficiency of production must be considered as the minimum ones.

The main thing now is to seek and bring into operation all reserves for raising the efficiency of production and the quality of products and for satisifying public demands more fully, and to do this in the centre and in the provinces. All our cadres must understand the vital need to reorientate every enterprise and industry, the whole national economy towards an intensive path of development.

One year ago, at the conference at the CPSU Central Committee, in which ministers took part, this was spoken about with all clarity. However, far from everyone has drawn the correct conclusions from that conversation. With some people, it went in one ear and came out the other, as they say; and yesterday's approaches remain.

Continuing to think in terms of extensive development, many leaders of ministries and departments are striving to get as much capital investment and other resources as possible while obtaining smaller production plans. Comrade Belyak, Minister of Machine Building for Animal Husbandry and Fodder Production, shows enviable persistence in the struggle for additional allocations of funds and the reduction of the plan indices outlined. The USSR Ministry of Construction Materials Industry, headed by Comrade Yashin, as well as certain other ministries and departments, have taken up a position which is no better.

Of course, we shall not allow ourselves to be led by a mood of over-dependency. Failure to understand the situation and lack of desire to readjust, and narrow departmental interests, must not prevail over the general interests of the people. I do not think that managers who are counting on once again drawing the country into enormous and unjustified expenditure can accompany us on our path. More demands must be made of local managers with regard to investments. The desire to receive more resources without thinking about the consequences has become a kind of style of work for certain Party and local government organs, and there are unfortunately many such instances.

At one time major decisions on the development of the productive forces of Krasnoyarsk Kray were adopted on the initiative of the Kray Party Committee and with the support of a number of ministries and the USSR State Planning Committee. This is a large and promising region; it must be developed in every possible way. But obviously both at the stage when these important decisions were prepared and in particular subsequently, in their implementation, all the issues involved in the new construction were not properly taken into account, nor were the opportunities for assimilating thousands of millions in capital investments properly studied. As a result - huge losses: the construction of tens of enterprises and power stations has not been completed - the outlays are not yielding a proper return. [Sayan-Shushenskoye hydro-electric power station is being built at a pace that is half that of Bratsk Station. For several years now buildings at the Abakan wagon-building association have been standing empty. Five thousand objectives remain still to be completed in the kray. As a result of the dispersal of forces, construction is proceeding at a slow rate and loss of resources is great.] We

have the right to demand from planning and management bodies - as well as from the Party organisation - that they introduce proper order and guarantee that large outlays by the state yield a rapid return and not be frozen in the soil of Siberia.

In general comrades, leading, major industrial regions must set an example of zealous management and the use of intensive methods of development. The Central Committee continues to pin great hopes on the working class and the intelligentsia of Moscow and the powerful scientific and production potential of the capital. We would like once again to support the significant work being carried out by the Leningrad Party organisation in transferring the economy to the track of intensification.

A few days ago, Comrade Vedernikov, First Secretary of Chelyabinsk Oblast Party Committee, said that a programme had been prepared for the reconstruction of a number of enterprises in the oblast. At Chelyabinsk tractor works alone it is planned, through reconstruction, to increase the volume of production by 50% with a reduction in the workforce of 10,000 people and decrease consumption of metallurgical and other raw materials. Some of the ministries concerned and the State Planning Committee formally supported the initiative of the people in Chelyabinsk. However, it looks as if they restricted themselves to that. And in general, the people of Chelyabinsk are for some reason out of luck in this matter. At one time, a decision was adopted to reconstruct the 1220 mill at Chelyabinsk tube-rolling plant and transfer it to production of large-diameter pipes. The outlay on this - to the tune of R150,000,000 - would have enabled an annual saving of R150,000,000 in foreign currency and partially dispensing with the purchase of pipes from abroad. This was necessary and advantageous; but it just died the death. Clearly the time has come, in the interests of the state, to call all those responsible for implementing adopted decisions to account for this procrastination and inability to get to grips with the matter, and to do so in earnest.

The CPSU Central Committee has the right to count on a great contribution to the acceleration of scientific and technical progress and the country's economic development from major scientific and industrial centres such as Sverdlovsk and Kharkov, Novosibirsk and Donetsk, Omsk and Gorkiy, and others. This is all the more essential because the reserves of many of them are far and away from being used fully. [The Central Committee hopes that their Party organisations will ensure the realisation of measures to switch the economy on to the track of intensive development.]

All this, comrades, is being said so that now, in the time that remains for work on the basic guidelines and in preparing the five-year plan, there should be manifested at all levels the sort of approach that would guarantee not only the absolute achievement of the indices contained in the draft but also an improvement on them. There is only one signpost here: with smaller outlays we must attain the higher targets in the 12th Five-Year Plan. Such is the economic, and if you like, the political task.

The advantages of the socialist method of production are inexhaustible. Unlike any other country, we can mobilise our huge reserves and concentrate funds on general directions of scientific and technological progress. The development of the economy according to plan, and the active creativity of the masses, open up scope for the development of the national economy. We have not learnt how to use all these advantages properly; at times we cling tenaciously to the old ways. In general, comrades, we have gigantic potential for growth, and it must be brought into action.

I should like to go on to express, in terms of principle, some thoughts about the main directions of the forthcoming work. I shall begin with the most important thing, the need for a drastic change in investment and structure policy. Basically, we must carry out integrated and strictly controlled work on moving the centre of gravity from new construction to the technical re-equipping of enterprises; from increasing the extraction of resources and the intensification of this work to the utmost economising on these resources; from the traditional boosting of production volumes to securing a sharp increase in the quality of output. This needs to be done now, while current and future plans are being drawn up. Otherwise, time will be lost. Ideas which are not embodied in plans will remain only empty phrases.

It is important to abandon unhesitatingly stereotypes for running the economy which developed in the past, stereotypes in which new construction was considered to be the main way of achieving production growth. The bulk of capital investment was channelled into new construction. Even amortisation deductions earmarked for renovation of enterprises went towards this new construction. The main flow of new equipment was also channelled towards new construction. For a long time many existing enterprises were not refitted with technical equipment and were not modernised. All that happened was that everything possible was squeezed out of them, as they say [while very little was put in].

The capital repair sphere has become inordinately swollen as a result of the aging of production equipment. Last year R35,000 million was spent on this. A quarter of the country's pool of machine tools and 6,000,000 workers are employed in repair workshops. Almost a fifth of our ferrous metals are used on this. [The return on assets decreases, the number of new workplaces grows and, at the same time, mechanisation of production is insufficiently introduced. The share of manual labour decreases slowly.]

That is the overall picture. But that picture is made up of specific industries, associations, enterprises and their leaders. It has to be bluntly said that many managers and Party officials have accustomed themselves to the situation which has come about. All this costs society too much. At the moment nobody denies that the return from capital investment in reconstruction is roughly double that from new construction. But the former [extensive] methods of running the economy are still alive and well.

Take a look at ferrous metallurgy. Over a period of 15 years, R50,000 million of capital investment was allocated to the industry. How has the Ministry of Ferrous Metallurgy used these funds? Most of it has been channelled into new construction - what's more into new construction which is not integrated. Meanwhile, the reconstruction and technical re-equipping of enterprises did not receive proper attention. Because of the incorrect technical policy of the collegium of the USSR Ministry of Ferrous Metallurgy and its Minister, Comrade Kazanets, the industry did not manage to fulfil either the 10th or the 11th Five-Year plans. It is not satisfying the national economy's requirements for good-quality metal products. The state of affairs here needs to be fundamentally changed.

In short, comrades, we must decisively change the correlation between new construction and the technical re-equipping of existing enterprises. The State Planning Committee and ministries have outlined certain positive changes in this area for implementation during the 12th Five-Year Plan-but they cannot be judged as meeting requirements. The proportion of funds earmarked for reconstruction in the overall volume of production and capital investment must be increased, already in the years immediately ahead, from one-third to at least a half. This is not a simple matter. We cannot manage without new construction. But there must be complete clarity in this matter. New construction should be embarked on only when opportunities to build up production on existing capacities have been exhausted or when it is necessary in order to resolve the contemporary tasks of technical progress.

Our country has embarked on too many projects. They should be carefully analysed. The construction of some projects should be speeded up. Others should be suspended or temporarily mothballed. An approach based on the interests of the state is needed here. This applies not just to the USSR State Planning Committee and the USSR State Committee for Construction Affairs but also to ministries and all central, republican and local organs.

At the same time a comprehensive inventory of production assets must be drawn up. A long-term programme for the technical reconstruction of every enterprise and industry must be outlined. In the immediate future, the share of withdrawal of fixed capital, particularly the active part of it, must be doubled. Including the entry into service of installations under construction, this will make it possible by the end of the 12th Five-Year-Plan to renew our manufacturing equipment by more than one-third, and have in it up to 50% new equipment. To this I should like to add that what we need is not

just any renewal of manufacturing, but only a renewal accompanied by the introduction of the advanced technology, yielding the highest economic and social results.

On the visit to ZiL, the matter of its reconstruction was discussed. The motor vehicle workers are preparing to launch a diesel lorry. Its freight capacity will be increased; its fuel consumption per 100 km will be cut from 29 to 19 litres. This is a tremendous result. But, as it turned out, not all matters of reconstruction were correctly resolved. Provision was made, for instance, to engage an additional 25,000 staff. Is this really rational, especially in the conditions of Moscow? Now the ZiL management has tabled a proposal to improve planning, so as to achieve targets without increasing staff numbers. Well, that is a different matter, as the saying goes, and is a position which can be supported.

A major and exceptionally acute problem of investment policy is posed by the relationship between capital investments in the resource-extraction, processing and consuming industries. The Soviet Union has at its disposal a mighty fuel and power complex, but it is becoming increasingly difficult to step up extraction of fuel and raw materials. Meanwhile, many countries have taken a more rational path, that of all-round economies and broad introduction of resource-saving technology. This costs half or one-third as much.

We also have positive experience of resource-saving. The Ministry of Electrotechnical Industry secured an increase in manufacturing output in the 11th Five-Year plan without increasing consumption of basic materials, although here, too, there are still large reserves.

[On the whole, our economy remains, in many respects, an extravagant one. Up to 8,000,000 tonnes of petrol are burned up every year unnecessarily because of lagging behind in the conversion of the lorry fleet to diesel engines. Because of the imperfection of equipment at thermal power stations, we annually overspend more than 20,000,000 tonnes of standard fuel. There are hundreds of thousands of primitive boilerhouses in the country which are using fuel irrationally. Secondary resources are used poorly.]

Savings in resources should be one of the main directions of investment policy. The problem is to meet 75-80% of the national economy's increased demand for fuel and raw and other materials by making economies in them. This will make it possible to stabilise the share of capital investment directed towards extraction of fuel and raw materials.

In the implementation of investment policy, serious thought, consistency and speedy achievement of national economic results are important. Of course a certain order of priority is inevitable in carrying out some measures or other; but once we have outlined certain tasks, their resolution must be complete, comprehensive, speedy and energetic. The dispersal of capital investment on the principle of "Ear-rings for every sister" cannot be permitted. In the new Five-Year Plan we must move more decisively towards concentration of capital investment [on the most economical directions].

Let us take the industries of the agro-industrial complex which are required to resolve the tasks set by the Food Programme. Now that we are drafting the basic guidelines for the 12th Five-Year-Plan, it is vital to make provision for reaching the programme's targets. Enormous potential has been created in this sector of the economy. We have achieved here the rational limits of building up capital investment. But the return on it is so far not satisfactory; and one of the reasons for this is poor concentration of sources in decisive sectors, and disproportion in the development of industries. We maintain large herds of stock; but their productivity is low because of a weak fodder base. Quite a lot of equipment is supplied in agriculture and the flow will increase; but the collective and state farms lack the appropriate repair and technical service base. Real conditions now exist for the broad introduction of intensive crop cultivation technology; but the matter is being pursued very slowly. More than once there has been talk of the effectiveness of investment in developing the procurement, storage, transporting and

processing of agricultural produce, but there are no perceptible improvements and nearly one-fifth of the harvest grown is lost. These are the matters which the management organs of the country's agro-industrial complex must deal with first.

Comrades, in re-equipping the national economy and carrying out the scientific and technical revolution the commanding, key role belongs to machine building. [Before the end of the 12th Five-Year-Plan period its growth rate should be raised by 50-100%. The task is to make maximum use of available capacities and to modernise this industry as a matter of top priority.]

We are faced with making radical changes to attitudes to the machine-building complex. Whilst the USSR State Planning Committee and other central organs have paid tribute in words to the role of machine-building, for a long time in actual fact they have not been allocating sufficient resources for its development. In the 11th Five-Year plan only about 5% of all capital investment in production was directed to civilian machine-building. One cannot fail to draw attention to the fact that heavy and transport machine building receives 28 times less capital investment than do the industries for which these machines are mainly intended; whilst machine-building for agriculture receives 18 times less; production of machines and equipment for the light and food industry 23 times less; chemical and petroleum machine-building 47 times less.

It is quite justified that a partial redistribution of capital investment ought to be able to be carried out, given the fact that the volumes of capital investment in industries which are consumers of machine-building output are in excess to this kind of extent. We ought to return once again to this matter, so that in the years 1986-90 capital investment for the civilian machine-building ministries is increased by 80-100% over the 11th Five-Year Plan. And this would correspond to the interests of the technical re-equipping of our economy. First and foremost, machine building itself must be reconstructed. Its re-equipping requires a sharp increase in the production of modern machine tools, forge and press, foundry, welding and other advanced technical equipment.

The Ministry of Machine-Tool and Tool-Making Industry will not be able to cope with this task alone. Clearly it is essential, following the example of the defence industries, for the output of special equipment for their own needs to be developed on a wide scale within each machine-building ministry. And in general the experience of the defence industries must be fully used. We have begun this work. It has to be continued actively.

[A task of special importance is to start the mass production of new-generation, equipment, capable of assuring a multiple increase in labour productivity and opening the way to the automation of all stages of the production process. It is important to change over to the supply of complete sets of equipment and to organise on a large scale repair and maintenance services by manufacturers.]

As is known, the development of microelectronics, computer technology, instrument making and the whole of information science is the catalyst of present-day scientific and technical progress. [They need to be developed at an accelerated pace.] They exert a decisive influence upon the effectiveness of the means of labour and of the technological systems in all industries. Here are some examples. In the Energiya scientific production association, flexible automated sections equipped with Soviet-manufactured machining centres and computer equipment provide a sixfold increase in labour productivity. Use of automated planning systems in the design bureaus of the aircraft industry has made it possible to raise labour productivity by 200% and to reduce the time taken in planning manufacture by 2.5 years. This is truly new technology which is bringing with it revolutionary changes in production.

[No doubt, a great deal depends not only on increasing output of electronic computers but also on competent use of such computers in the national economy. We have taken major decisions on this score and their fulfilment should be strictly monitored.]

Over the past few years, the CPSU Central Committee and the USSR Council of Ministers have taken a number of major decisions on such key directions of the development of machine building as flexible automated production, rotary and rotary-conveyor lines, the development, production and use of computer technology in the national economy and systems for automated planning. They are directed towards the creation of new technological processes, including automated factories using so-called technology without people. In this way a serious base is being laid for a mighty upsurge in Soviet machine building as the foundation of the technical reconstruction of the national economy. This is the main direction of our development and it must be firmly adhered to, both now and in the future.

[The state of affairs in capital construction should also be assessed from the point of view of accelerating scientific and technical progress. This problem has been on the agenda for many years, but no cardinal improvement has yet occurred. This nullifies in many ways our efforts in the field of scientific and technical progress.

[Ineffective technological solutions are often provided in the project designs. Therefore, a sizeable portion of them have to be returned every year for revision. There is a continued dissipation of capital investments and the deadlines on construction work are incredibly prolonged. As a result, even the finest projects become hopelessly outdated. We cannot carry on building in this way any longer. It is necessary to establish order in planning and designing construction, ensure concentration of capital investment and observance of norm deadlines for the completion of construction projects and make construction work a single industrial process.

[The efficiency of the national economy and our growth rates depend in many ways on the structure and quality of materials. In this matter we are so far behind modern requirements. It is known, for instance, that we produce more steel than anyone else and yet we are chronically short of metal. The main reasons for this are insufficiently good quality, limited range of products and, of course, wasteful use. The share of plastics, ceramics and other advanced non-metallic materials in the overall volume is so far small. In the world today there is a real boom in the small-tonnage chemical industry and in production of pure and superpure materials which determine in many respects the level of present-day technology. Therefore it is necessary to double or treble our efforts to prevent ourselves from falling behind.

[The problems of production infrastructure have become acute at the present stage of economic development. The lagging behind in transport, communications, material and technical supplies and other branches leads to great losses. It is necessary to find additional opportunities for solving this acute problem of the national economy.

[The tasks of scientific and technological progress, the speaker went on, require us to take a new approach to all our external economic activities. The country's foreign trade turnover has reached no small figure, R140,000 million. But its growth rates can and must be speeded up and, most importantly, the nature of our exports and imports should be made more advanced.

[Our exports of machinery and equipment have been growing slowly in recent years. There are several reasons for this: both low competitiveness by many of them and insufficient interest on the part of the enterprises in working for export. We must not put up with this any longer. It is necessary in import policy to use more effectively the opportunities offered by the mutually beneficial international division of labour. This refers, of course, above all to our relations with the CMEA countries.

[The speaker raised as a matter of urgency the question of the need to establish better order in the use of imported equipment. As an example of carelessness towards it, mention was made of the work of the USSR Ministry of Petrochemical Industry. Minister Comrade Fedorov gave assurances more than once that he would rectify the shortcomings, but evidently he does not keep his promises. The CPSU Central Committee has given instruction that the matter should be thoroughly investigated and the results of the inquiry reported to the Politburo.

[The new technical reconstruction of the national economy will require enormous capital investments. Where are we to obtain them? The principled answer to this question is: The measures planned to speed up scientific and technical progress should recoup themselves. Indeed, they are being carried out for the purpose of raising labour productivity and, hence, speeding up the growth of the national income. But this will take a certain time, while the funds are needed immediately. So we cannot do here without manoeuvring with resources, concentrating them on the key sectors.

[The priority task is to mobilise organisational, economic and social factors, introduce order in everything and improve the organisation of production so as to ensure the best use of what the country possesses. At each association and enterprise, at each production unit, it is necessary to identify the areas where it is possible to obtain the maximum effect for the least outlay, or even without any outlay at all. It should be firmly established in the mind of every Soviet citizen that a regime of economy is our road to prosperity and is really the task of tasks. This is a task for the entire Party and the whole people.

[A certain shift towards an improvement in the quality of output - which is the most precise and comprehensive index of scientific and technical progress and of the standard and discipline of labour - has taken place in recent years, the speaker said. But one must admit that the quality, the technical and economic standard, of products remains one of the vulnerable elements of the economy, a source of many difficulties and problems. All this does serious social, economic, moral and political harm. And it is totally impermissible when newly developed equipment turns out to be technically obsolete even at the design stage and does not meet optimum standards of reliability, service life and efficiency. Even products placed in the highest category sometimes do not bear comparison in their parameters with the best world models. There must be stricter observance of the requirements that are to be met when the state quality mark is awarded. Quality of output should be a matter not only of professional but also of national pride.

[The problem of quality, of course, cannot be solved at a stroke. But in this work there can be no justification for any procrastination whatsoever. Nobody has the right to remain on the sidelines - not a single enterprise, not a single designer, production engineer or scientist, not a single worker or collective farmer: in short, not a single working man. The Party will actively support the struggle for the prestige of the Soviet trade mark and will strictly call to account those who take a passive stand and slow down the solution of this very acute problem.]

Comrades, the front line of the struggle to accelerate scientific and technical progress in the national economy runs through science. A mighty scientific and technical potential has been set up in the country. Approximately 5% of national income is set aside for the development of science. The successes of Soviet scientists in various fields of knowledge and technical progress are universally acknowledged. One can be proud of the pioneering achievements in space research, mathematics, mechanics, thermo-nuclear fusion and quantum electronics. Good results have been achieved in such fields as nuclear energy, research into the structure of the Earth's crust - including the world's deepest borehole - the study of the oceans of the world, synthesis of organic compounds, the creation of advanced materials and technical processes. There are certain achievements in genetic and cell engineering capable of revolutionising the processes whereby new and high-yielding strains of plants and animals resistant to disease and unfavourable climatic conditions, are reared. We have quite a few first-class institutes, design bureaus and creative cadres. In almost every direction, one finds highly effective scientific and technical research developments, such as rotor-conveyor lines which increase labour productivity many times, automated welding systems, small ultra high-pressure presses, modern forging machines which ensure a substantial reduction in metal waste in the engineering industry, highly effective types of polymer materials, and much else besides.

At the same time, comrades, we can and should obtain incomparably greater effects from science. We should take a new look at the tasks of science, in the light of the requirements of our time; requirements that science be turned decisively towards the

needs of social production and that production ought to turn all its attention to and concentrate all its efforts on science. It is from these positions that all links in the chain binding science, technology and production ought to be analysed and strengthened.

The USSR Academy of Sciences, which assembles the best-qualified scientific cadres, is naturally the nucleus of the homeland's scientific potential. Numerous institutes of the Academy are research centres of world standing. However, there is still quite a lot to be done for the work of all institutes to be on a level commensurate with the Academy and to replenish this treasury of knowledge with new discoveries.

The development of pure science must be given priority importance. It is precisely this science that generates ideas, effects breakthroughs in new fields and makes it possible to attain new levels of efficiency. Pure research is a matter too crucial to reconcile oneself to weaknesses or to allow sluggishness and maladroitness in the development of such research.

Academic institutes must be turned around sharply to face the direction of expanding research which is technological in its thrust, and their role and responsibility for creating theoretical foundations for fundamentally new types of equipment and technology must be enhanced. We have abundant traditions in this. One has only to recall the pleiad of Soviet scientists, leaders in the development of technological sciences, Academicians Bardin, Lebedev, Tupolev, Kurchatov and Korolev. There is no doubt that these traditions will be multiplied.

In connection with this, it would not be amiss to examine the possibility of setting up a department for engineering problems. The organisation, within the framework of the USSR Academy of Sciences, of integrated, inter-industry scientific and technical centres based on the experience of the Paton Electric Welding Institute and other scientific establishments is highly effective. Party workers, numerous scientists and specialists are in favour of this. Such centres are capable of being pilot organisations, co-ordinating pure research and the whole of work along the most important, interindustry, scientific-technical directions.

They could be headed by the most prominent scientists and specialists who have experience of both scientific and organisational work. It is evidently fitting for such centres to have design organisations and experimental enterprises. In this way we would solve the problem of exploiting space and nuclear energy. Renunciation of this valuable experience would be foolish. It is already time to place this work on a practical footing. The Presidium of the USSR Academy of Sciences and the State Committee for Science and Technology must prepare and submit proposals.

Science in higher education establishments has great reserves at its disposal. For two decades, if not for longer, we have been speaking about the need for efficient use to be made of this tremendous scientific potential and about eliminating bureaucratic divisions between research establishments, establishments of higher education, and production; but the situation is changing only very slowly. According to available assessments, establishments of higher education could increase the volume of scientific research work by 100-150%.

To achieve a decisive increase in the national economic return here we need to change the system of planning, introduce new criteria for assessment, improve the system of levers and incentives and, to achieve real effect, transfer enterprises for the creation of experimental production systems to higher education establishments. We shall gain a twofold advantage. On the one hand, we shall multiply our scientific and technical potential and increase the efficiency of its use. On the other hand, we shall also create conditions for better training of specialists who - right from their study desks - will be attracted on a wide scale to creative work in improving production.

But I would say particularly severe demands must be made of industrial science [must be made of the research establishments of the various ministries. Their performance causes serious complaints.] The state undertakes enormous expenditure in

maintaining industrial scientific and technical organisations. More than half the country's scientists are concentrated here, and about 90% of all allocations for research and development is directed here. Hundreds of research establishments, and planning, technical and design organisations come under the authority of industrial ministries alone. The final results of the activity of many of them, from the industry's scientific and technical point of view, are very low. The Ministry of Chemical Industry, for example, has literally become overgrown with a multiplicity of various scientific institutions and experimental production systems. But it is precisely this industry where major shortcomings in developing new materials and equipment have arisen and delays in scientific work have been tolerated.

And it is not only the chemical industry workers who are in this situation. Let us take the All-Union Aluminium and Magnesium Institute of the USSR Ministry of Non-Ferrous Metallurgy. Here powerful electrolysis baths for aluminium production were constructed. Now, when more than 350 of them have been produced, it has turned out that as a result of construction faults their fuel consumption greatly exceeds design specifications. Now an extra R1,000,000 is needed to put these installations right.

Paradoxical as it may seem, the main weakness of industrial science lies in its isolation from production. In order to overcome this, many of the industrial institutes and planning and design organisations should - right now - amalgamate with associations of [and] enterprises and thereby strengthen the factory, sector of science. Side by side with this we need to establish in general the extent to which the existing network of industrial scientific establishments and organisations corresponds to modern demands. In the current five-year period, the State Committee for Science and Technology undertook such an attempt, but the work was not carried through.

It is very important to give new impetus to all work on developing the network of major scientific production associations which should become the real outposts of scientific and technical progress, like the Kriogenmash and Svetlana scientific production associations, and the association for the production of lubricating equipment, and a number of others. At present insufficient attention is being given to this important matter: In a country as huge as ours, there are just 250 of them, and the appropriate conditions have not been created for them.

Raising the effectiveness of science to a great extent depends on the state of the testing, experimental, planning and design base which, it must be frankly said, because of our errors in calculation, has lagged far behind in its development and hampers the introduction of scientific discoveries and developments. The problem of developing the testing base and of supplying scientific apparatus and instruments must be solved, and as quickly as possible. Here we also await specific proposals from the USSR Academy of Sciences, the State Committee for Science and Technology, and other institutions.

The technical creativity of the working people must play a no small role in accelerating scientific and technical progress. It is essential thoroughly to improve work with inventors and rationalisers and find ways of selecting innovations and guaranteeing their speediest introduction. The proposals for creating consultative and introductory (Russian: vnedrencheskiy) organisations, engineering firms and so on merit careful study. The efficacious protection of Soviet inventions must be guaranteed. On the example of Lenin's decree on inventors, and taking into account the experience of other developed countries, we should work out and adopt a USSR Law on Inventions.

[Much will have to be done for research and technical development to yield a speedy and weighty economic result.] The CPSU Central Committee and the Soviet government expect the country's scientists and all the scientific and technical intelligentsia to take to heart those tasks which are being put forward by the Party, to spare no efforts for accelerating scientific and technical progress. [applause]

Comrades, as you well understand, the acceleration of scientific and technical progress insistently demands a profound reorganisation of the system of planning and management and of the entire economic mechanism. Without this, everything that we

are talking about today may remain just fond hopes. We have been going round these problems for many years now; we are sizing up how best to tackle them. But there is little real progress forward. The obstacle, apparently, is dread of blundering, of going for resolute actions, and at times patent conservatism as well. Today, too, we are coming up against essentially the same problems as arose decades ago, but they have become more acute. We are becoming more and more clearly convinced that inertia and going through the motions in this work are no longer tolerable. Serious political and practical conclusions must be drawn from the experience of the past and, without losing time, we must go over to creating a highly efficient system of planning and management.

The main direction in the reorganisation of economic management is clear in principle to us: It lies in the deeper and more compehensive use of the advantages of the socialist economy. We must advance along the line of further strengthening of [and] development of democratic centralism: Raising the efficiency of the centralising principle in management and planning; significantly expanding the independence and responsibility in management of enterprises and associations; active use of more flexible forms and methods of leadership, financial autonomy and goods-money ratios and the whole arsenal of economic levers and stimuli - that is the essence in principle of the reorganisation.

Unity of central and local efforts, diversity and elasticity of socialist management practices and broad development of initiative from the masses are a reliable key to success. In socialist conditions the main criterion for evaluating the work of any link in the economy must be the achievement of the very best final results and the fullest possible satisfaction of society's requirements. The entire system of management and the whole economic machinery must be geared to this. To put it in a nutshell, we must overcome the domination of the consumer by the producer, eradicate shortages of both production resources and objects of consumption, make the economy dynamically balanced and as receptive as possible to scientific and technical progress and ensure that all sections of the national economy have a vital interest in this and that they are inevitably responsible for the application of the latest achievements of science and technology, and for the achievement of top world standards.

You know that the Politburo of the Central Committee is working actively on the solution of these problems. More and more industries are joining in the large-scale economic experiment. But, as we agreed at the April Central Committee plenum, we must move on from the experiment to the establishment of an integrated system of management and administration.

Incidentally, when I was in Leningrad, my attention was drawn to one rejoinder. I have not mentioned this before, but it should be mentioned. When we repeat that we are carrying out an experiment here or there, with this purpose or that and then we say yet again that we are carrying out an experiment, people begin to worry. In Leningrad they are saying: Instead of tackling problems properly, they are hiding from us and making excuses that they are carrying out an experiment. Years and years pass, they say. Experiments are carried out - but nothing changes.

The people know how to get to the bottom of things quickly. They get the essential point quickly. If we spend a year, two years, three years going on about the experiment which we are carrying out, which we have extended to another two or three industries, and so on, but fail to devise an integrated system making it possible to unite our entire national economy in a single organism based on the application of new principles of economic management, no progress will be made. The drawing up of such a system must be completed in a short space of time, so that all branches of the national economy can be converted to new methods of administration and management during the 12th Five-Year Plan. We must start from the top echelons.

The extremely important tasks connected with the scientific and technical revolution demand a substantial improvement in planning and a radical enhancing of the role and responsibility of the USSR State Planning Committee, as the central body responsible for administering the planned economy. We must implement in practice Lenin's stipulation about the transformation of the State Planning Committee into the

country's economic science organ, gathering together major scientists and leading specialists. This must be done so that, as Lenin put it, we may have broad plans backed up by equipment and trained science.

It is time, for example, to change the state of affairs in which the plan for new equipment exists in isolation, as it were, without having a decisive influence on the indices of economic and social development.

[The main reserves for the attainment of the highest effectiveness are to be found where industries overlap. To hope that the State Planning Committee would be able to look into all the chains of inter-industry connections and choose the best variant would be to indulge in illusion. Neither can the ministries cope with this. All this places on the agenda the question of creating bodies for the management of big economic complexes. The role and functions of the ministries should change in the new conditions. They will be able to concentrate their maximum attention on long-term planning and large-scale use of innovations for raising the technical standard of production and products. It is necessary to reduce considerably the administrative staff in industries and abolish superfluous links.]

On the contrary, it must become a kind of supporting structure of the whole plan. The leading place in the plans must be occupied by the qualitative indices which reflect the effectiveness with which the resources are used, the scale on which the output is up-dated and the growth of labour productivity on the basis of the achievements of science and technology. The transfer of planning onto normative methods, both in determining expenditure and in drawing up tasks, based upon effectiveness and satisfaction of social requirements, should be completed. It is precisely this approach which creates the prerequisites for economic activity by enterprises and associations, and which gives an impulse to the initiative and the creative activity of the labour collectives. In this way the transition from administrative to economic methods of economic management will be carried out more quickly.

There is also the matter of the place and role of the Committee for Science and Technology. The CPSU Central Committee receives many critical observations about this organisation. The Council of Ministers must determine the competence of the Committee precisely. Clearly, responsibility must be placed upon the committee for the exercise of control over the scientific and technical level of the industries within the national economy and the conformity of our production with the best world achievements. Without substituting itself for either the planning organs or the ministries, it must concentrate main attention upon forecasting, on choosing and justifying the priority directions for the development of science and technology and the formation of a stock of research and development work as a base for the taking of progressive planning decisions. And this must be served by an integrated programme of scientific and technical progress. [Much has to be done to improve the structure of the republican management bodies, where the number of ministries and departments is far too great and continues to grow. There, the problem of integration and concentration of management is even more ripe than at the union level.]

Comrades! It has to be said quite definitely that scientific and technical progress will not be speeded up if the role of the basic production link, the association and the enterprise, is not raised and if their activity is not reorientated. The centre of gravity of all operational and economic work has to be removed to the localities, the labour collectives, making the association and the enterprise directly subordinate, as a rule, to the ministries, that is to say, we have to go over to a two-link management system. [The work to be done is not "patching up holes", not simply merging or splitting organisations or moving staff from one office into another. It is necessary to resolve the issues pertaining to the improvement of the organisational structure boldly, with good substantiation and, the main thing, in a comprehensive, and only in a comprehensive manner, from the upper to the lower echelons, both vertically and horizontally.] The activity of every production association will have to be examined from all sides from this point of view, their structures will have to be defined precisely and leaders will have to be

singled out who are up to the level of present-day requirements, ones with a powerful scientific and technical potential. They should receive priority development, and be given jurisdiction over those enterprises and organisations which are working less effectively.

Many people remember that at one time, when the associations were being organised, instructions were given that they should be set up on the basis of enterprises irrespective of the departments and territorial units to which these belonged. But in fact associations were created not even within the framework of ministries for particular industries, but within the framework of all-union production associations. Under limited conditions like these, it was naturally not possible to form a rational and effective network of associations. Now the formation of inter-industry associations must be supported in every way. This is a promising thing, as is shown by the experience of the fraternal countries, first and foremost the GDR.

As you see, comrades, life itself has placed on the agenda issues involving the further improvement of the organisational structure of the management of the national economy. What is more, at the meeting at the Party Central Committee this problem unexpectedly, in our view, but that was indeed at first sight, a superficial view - was raised acutely. And what was it about? And particularly by those enterprises which had begun to go over to the new methods of economic management. But this is what it is about, that the ministries, in their present form, in the way they function, in the way they manage the enterprises and associations which are subordinate to them, have no interest in the economic experiment, and particularly they have no interest in the introduction of those principles upon which we are carrying out the experiment. After all, the main idea is to extend the independence and to raise the responsibility of the enterprise and to achieve high end results. The ministry, with the aid of the State Committee for Labour, the Ministry of Finance and in some cases the State Planning Committee, has tremendous experience and the ability to keep a tight rein on everybody and interpret the resolutions of the Central Committee and the government in such a way that, after their application and all the recommendations, nothing is left of these principles. [applause]

If the ministers are applauding, too, the ice has begun to shift. [laughter and applause]

Readjustment of the organisational structure of management will not give the desired result if it is not organically linked with a strengthening of financial autonomy, and of economic levers and incentives. We need a mechanism which really ensures advantages to labour collectives seeking success in speeding up scientific and technical progress. We need a mechanism which makes the output of obsolete and inefficient goods unprofitable, and economically punishes both the management and the labour collective, and in the final analysis leads to a deterioration in the indices of the enterprise's work.

Special advantages should be granted to collectives which produce the best and most competitive goods, and compete successfully in the world market. Such collectives should have at their disposal more funds for production and social development and for wages. It is essential to improve substantially the whole system of enterprises' incentives for the production of goods for the export market. To this end it is necessary first of all to adopt measures increasing the influence of the consumer on the technical level and quality of output. The consumer's opportunity to select the best goods could be extended by arranging contests between manufacturing enterprises, by development, concurrent with accumulation, of the resources of wholesale trade, and enhancing the role of direct links and economic contracts.

Second, price-setting must be fundamentally improved, so that it can foster the successful implementation of economic policy and the speedier introduction of everything new and progressive, and absolutely compel managers to constantly improve equipment and technology and resolve on a daily basis tasks of resource-saving and strictly observe the regime of economising. Here, things are far from all being resolved. How often has it been said that prices for the best and highly efficient goods should guarantee higher profitability, and make worse and inefficient goods unprofitable.

Third, we must in practice transfer associations and enterprises onto complete financial autonomy and sharply reduce the number of centrally set plan assignments. Scientific and technical progress requires more freedom and flexibility in adopting decisions at the level of the association and enterprise, for the introduction of advanced technology is organically linked with the selection of options, quick reaction to new things and an interest in the final result. So far associations and enterprises do not have full control over their financial resources and cannot independently choose the most rational ways of running their affairs or of heightening efficiency.

During the meeting at the CPSU Central Committee with managers of enterprises, some comrades displayed a collection of plan indices from the platform. These are thick books, comrades. Furthermore, it turned out that each ministry, and even each all-union production association, arbitrarily includes many unnecessary indices in its plans. It is time to impose order in this field by legislative means and establish a strict list of indices built into the plan. The activities of enterprises and associations must be regulated to an ever greater extent by economic norms. In making associations and enterprises more responsible for raising the technical standard of production and the quality of output, we must give them the opportunity to earn for themselves the necessary wherewithal for this and manage these funds independently, by relaxing the restrictions on their right to make use of development funds, amortisation deductions, additional profit and credit. All that is important is to ensure that modern equipment and contracts for construction and assembly work get priority in the allocation of funds from these sources and that the established procedures for the use of foreign currency deductions derived from the delivery of export production are adhered to.

A certain amount has already been accomplished in this field during the large-scale economic experiment. The opportunities of associations and enterprises have been expanded somewhat. But to a significant extent they still have not been able to implement their ideas because plan and finance bodies, ministries and all-union production associations have made use of production development funds conditional on so many additional requirements that they have basically nullified the rights of enterprises.

Fourth, we must establish a close relationship between the results of a collective's work and the system for the remuneration of labour. At the moment the level of remuneration hardly depends at all on efficiency, on whether good or bad output is produced. But there must be a direct link here. Basically, it is a matter of extending the principles of collective contracting to the activities of associations and enterprises. It is important to be more bold about widespread creation of enlarged, integrated and financially autonomous teams in all industries, teams which are geared towards the final results of production. In the years immediately ahead they must be turned into the main form of management at enterprises and organisations.

It has become essential to impose order in the use of funds for the payment of bonuses to work collectives and employees for successes in the acceleration of scientific and technical progress and the rapid application of the latest achievements. Our system of material incentives is extremely confused, cumbersome and inefficient. There are dozens of different forms of incentive existing side by side. Many have already become accustomed to the fact that bonuses are frequently regarded as some kind of mechanical addition to wages and paid to everybody without exception, regardless of the contribution made by a specific employee to the results achieved. Wage levelling flourishes in these circumstances. The stimulating role of the bonus is lost. The State Committee for Labour and Social Problems and the AUCCTU must investigate this matter and make well-founded recommendations.

Proposals for widespread application of new management methods have now been prepared. They envisage additional measures aimed at raising the efficiency of production and the quality of output and, in particular, accelerating scientific and technical progress. These measures will shortly be examined by the Politburo.

Everything which is out-of-date must be boldly eliminated so that a, so to speak, "cost-conscious" economic mechanism can start operating at full capacity - an economic mechanism which will stimulate economic development and, literally, rap the knuckles of sloppy economic planners, those who like to extract as large an amount of resources and capital investment from the state as possible and give as little as possible back.

In other words, there is very serious work to be done on improving the system of management and administration. We cannot postpone the implementation of this work, since we realise that unless we create new economic and organisational conditions, there can be no real acceleration of scientific and technical progress.

Comrades, in speaking today about Party work, I address myself, first and foremost, to the secretaries of central committees of communist parties of union republics, to kray and oblast committees and to all Communists. I would like to stress yet again: Times have changed. They are making new demands of Party activity, of its style, methods and results, and hence of cadres. Party work deals with the decisive factor in all changes - the human factor. From this springs its main directive, that of bringing about a change in the minds and attitudes of cadres from top to bottom and concentrating attention on the most important issue, scientific and technical progress.

The whole experience of the Party says that there is little that can be changed in the economy, management or education if a psychological readjustment is not made, if the desire and the ability to think and to work in a new way is not produced. A simple truth, it would appear, but it is one that our cadres - and not just our cadres in the economy - are recognising still only with difficulty and with caution. But it has to be said, comrades, that in this case we are talking about a long-term, political line. And not one of the problems that we are obliged to solve to-day can be put off until tomorrow. One cannot linger. One cannot wait, for there is no time left for warming up, it has all been exhausted in the past. Movement must be ahead only, and must build up speed.

Present-day approaches to social and economic, scientific and technical and ideological and educational problems must be stimulated in every way. I would say that understanding of the situation must be deepened and the spirit of self-criticism and of a businesslike attitude must be strengthened. The determining factor is the attitude and the atmosphere which the Party organisations are capable of creating everywhere - the strength of the Party barrier against all manner of backwardness, departmental and parochial distortions, against bad management and squandering. The acceleration of scientific and technical progress requires a cardinal change in the situation which has come about with engineering and technical and with scientific cadres.

Of late, the CPSU Central Committee has been approached on this issue by Academicians (?Muromtsev), Prokhorov, Ishlinskiy, Tuchkevich and other comrades. They express well-founded alarm about the state of training of the new shift of scientists, about the fall in the prestige of engineers, the reduction in the flow of talented young people into the field of technical and scientific activity. All this is linked in no small measure with serious shortcomings in the training and use of specialist cadres and with distortions in the payment of their labour. Clearly, the time has come when a serious reorganisation of higher and secondary specialised education is necessary. Measures to raise the social recognition of the labour of the scientist and engineer, to intensify the creative initiatives within it, raise the extent to which he is technically equipped and introduce the automation of technological and planning and design work should be thought over.

What lies ahead is, raising the personal interest of scientific and engineering and technical workers in the results of labour, stimulating good-quality fulfilment of jobs by fewer employees and on this basis raising their level of pay. The first steps in this direction, as you know, have already been undertaken by the Central Committee and the government.

Taking into account the rapid renovation of the conditions of modern production, systematic work in retraining management and scientific and technical

cadres acquires particular urgency. It is essential to improve training and retraining of workers, especially in new specialisations which are coming into being in the course of the implementation of scientific and technical progress. It is essential to prepare such measures without delay. These measures must be combined with a significant expansion in the sphere of the use of qualified labour and a cut-back in zones of unskilled, heavy and harmful work.

We need to strengthen Party influence on the whole course of scientific and technical progress, fortify the Party stratum in its key sections and pay more attention to work within the collectives of scientific research and planning and design organisations, technological services and scientific and technical societies.

Experience shows that a successful form of Party guidance of scientific and technical progress is provided by the councils for promoting scientific and technical progress at the central committees of the union republican, communist parties and kray, oblast and town Party committees.

I would like to speak about the Party organisations of ministries. Obviously, the reasons for the many shortcomings and errors we are talking about lie hidden in the fact that the Party committees of ministries have here and there lost their political acumen in perceiving and dealing with the most important socio-economic issues and have backed away from their monitoring functions - a right with which they are endowed by the CPSU Rules.

It is difficult to believe that the Party organisations of ministries where things are not going smoothly do not see the shortcomings and the reserves for improving matters. The Party committee of ministries, being plenipotentiary representatives of the Party, are obliged to stir themselves sharply, raise good order and responsibility in the collectives and get to grips specifically, from Party positions, with the cardinal issues of the development of various industries.

To tell you frankly, instances do not come to mind where any Party organisation from any ministry has raised the matter of the state of affairs in the industry on a level of principle before the CPSU Central Committee. They do not come to mind. The new technology will be dead without new attitudes to labour and discipline and without a high level of work standards. A decisive turn of the national economy towards acceleration of scientific and technical progress demands equally decisive measures in strengthening organisation and order in all the sections of production and management. Demandingness and again demandingness, that is the most important thing which is dictated to us by the situation which has arisen.

Weightier words must also be said by communists working in the organs of the people's control. The situation demands that the socialist system of people's control should work more actively, that it should tackle major socio-economic problems that it should not allow managers who have stopped caring about state affairs to take life easy.

A broad field of activity - specific and responsible - is also open before ideological and propaganda work. It is essential to underpin all our tasks, as Lenin taught, with a sufficiently broad and sturdy base of conviction and to interest millions and millions of working people in it. Scientific and technical progress is a vitally important matter. It is in the interests of all, it allows all to reveal broadly their gifts and talent. We are counting upon a high level of creative activity and skill on the part of our working class, the peasantry, the intelligentsia, engineers and scientists. We expect particularly a great deal from young people, their energy and their inquisitive mind and their interest in everything new and front-ranking. Ideological and political education in all its forms must be linked as closely to life as possible and the tasks in speeding up social and economic development of our homeland. Herein lies the essence of the changes which we have to make today in our ideological work. And there must be more energetic action in this direction, without loss of time.

[Then the speaker touched upon current issues of economic activity. He pointed out that the working people of the country are faced with the important task of successfully completing the current year and the Five-Year Plan period as a whole. It is important for the Party organisations to have concern for an all-round increase in the production of fuel and other raw materials for industry, organise timely and high quality agricultural work and harvest and preserve the whole of the crop. The point is that the country should enter the new Five-Year Plan period having plenty in hand and in an organised manner.]

Comrades, we are faced with a mass of things to do, innovatory things, things on a large scale, difficult things. Will we be able to cope with them? The Central Committee is confident that we shall be able to do so. It is our duty to cope, but this will require of each one of us much brainwork, hard labour and immense self-discipline, deliberateness and organisation. It is not part of the Party's tradition, and it is not in the nature of Soviet people to fear the complexity of tasks, withdraw in the face of difficulties or become weak and complacent, particularly at crucial and responsible moments in the life of the country. When the republic of the Soviets was taking its first steps towards socialism in an incredibly difficult situation, Lenin wrote with confidence: "We shall find a way out, for we do not embellish our situation. We know all the difficulties, we see all the maladies and are treating them systematically and persistently, without getting into a panic." And today, a deep faith in the creative strength of the workers, peasants, intelligentsia, and in the lofty moral spirit and will of the people, nourishes the Party's optimism. But optimism does not release anyone from work. We will have to work solidly.

The policy of the CPSU is actively supported by the whole of society. Soviet people link great hopes with the ideas, initiatives and plans which the Party is bringing to its 27th Congress. It is the duty of the Party of Communists to justify them, to show that we are taking up the matter in a serious way. We have sufficient strength and firmness to enable us to ensure that words and deeds do not differ, relying upon the living creativity of the people and strengthening the alliance between science and labour. In politics and in life, that is the main thing. [applause]

[Announcer] At the conference speeches were made by Comrade Shcherbitskiy, member of the Politburo of the CPSU Central Committee and First Secretary of the CP of Ukraine Central Committee; Comrade (?Kabaidze), directorgeneral of Ivanovo machine-tool production association; Comrade Vorotnikov, member of the Politburo of the CPSU Central Committee and Chairman of the RSFSR Council of Ministers; Academician Velikhov, Vice-President of the USSR Academy of Sciences; Comrade Grishin, member of the Politburo of the CPSU Central Committee and First Secretary of Moscow City Party Committee; Comrade (?Buderkin), director-general of the Omskshina production association; Comrade Zaykov, First Secretary of Leningrad Oblast Party committee; Comrade Shevardnadze, candidate member of the Politburo of the CPSU Central Committee and First Secretary of the CP of Georgia Central Committee; Comrade (?Bugakov), Chairman of the Bolshevik collective farm, Ordynskoye Rayon, Novosibirsk Oblast; Comrade Vedernikov, First Secretary of Chelyabinsk Oblast CPSU Committee; and Comrade Shkabardnya, Minister of Instrument Making, Automation Equipment and Control Systems.

The conference will continue its work on 12th June.

[Video note: The following were observed to be present in the body of the hall: Baybakov, Talyzin, Dymshits, Smirnov, Nuriyev, Shcherbina, Ryabov, Martynov, Marchuk (First Deputy and Deputy Chairmen of the USSR Council of Ministers); Menteshashvili. Griskevicius, Afanasyev ('Pravda' Editor in-Chief); Bugayev, Minister of Civil Aviation; Mishin, First Secretary of Komsomol Central Committee; Army Gen Shabanov, Deputy Defence Minister. Academicians Basov and Paton; and Stukalin, head of the propaganda department of the CPSU Central Committee.]