

ATOM -- *suprise uznabzob.*

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OBJECTIVES, ACHIEVEMENTS OF CEMA'S 'INTERATOMINSTRUMENT'

Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 28 Jun 72 p 3 L

[Ye. Kubichev interview with A.M. Petrosyants, chairman of the USSR State Committee for the Utilization of Atomic Energy: "The Beginning of a Biography"]

[Text] Andrey Mikhaylovich Petrosyants, chairman of the USSR State Committee for the Utilization of Atomic Energy, answers the questions of our correspondent Ye. Kubichev.

[Question] As is known, Andrey Mikhaylovich, at the beginning of this year an agreement was signed in Warsaw creating the "Interatominstrument" [IAI] International Economic Association on Questions of Nuclear Instruments and Apparatus. This is the first economic association within the CEMA framework.

Could you talk to our readers about the new organization, about the reason for its creation and about the objective scientific, technical and economic processes which made its existence vitally necessary?

[Answer] IAI was created within the framework of the comprehensive program for further expanding and improving cooperation and development of socialist economic integration of the CEMA countries. The creation of the new organization was dictated by the logic of the development of nuclear instrument building. Hitherto, in mentioning the socialist countries which have joined forces in IAI, there has been an unnecessary parallelism; at times we have been developing and producing instruments of similar technical quality for one and the same purpose. As a result, the production of certain types of nuclear instruments in our countries has been on a small series and even individual basis.

This applies also to our country, although the USSR's demand for this sort of apparatus and instrumentation exceeds the demands of all the other socialist countries put together. On the other hand, it is not possible for each of the countries to supply itself with the whole range of apparatus and instrumentation as well as to develop and produce them at the level of the best world models. As a rule these instruments are expensive to develop and the cost of their creation is sometimes not recovered if they go into small series production. Some types of instruments have been produced in quantities insufficient for the country's national economy and it has been necessary to purchase them in the capitalist countries at considerable cost.

This situation gave rise to the idea of organizing, sharing duties and, in a planned fashion, embarking on the development and production of the necessary apparatus within the framework of the comprehensive program for socialist economic integration. At first, as is always the case, many very different forms of cooperation were proposed, and in the end one of these forms was approved. It was decided to create an international economic--financially autonomous--association. This idea was very willingly supported by the CEMA member countries which subsequently became founders of the new organization.

[Question] What practical tasks confront the young organization and what is the range of its interests?

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[Answer] The IAI's main aim is the fullest satisfaction of member-countries' demands for high-quality nuclear technology instruments and installations which conform to world scientific and technical standards. This chief task of the association will be fulfilled on the basis of scientific, technical, production and trade cooperation.

In practical terms IAI will begin its activity by improving the distribution of the apparatus in our countries. At this stage trade cooperation should be the IAI's main activity. The association will take stock of the output in the countries and compare it with the demand for each type of instrument, striving for optimal satisfaction of orders from the association's member-countries. A surplus or shortage of certain types of instruments will signal the need for a change in their production plans.

As the association accumulates experience and its own resources it will be able to submit orders for the production of different kinds of instrumentation to the IAI member-countries, giving preference to the best models. It is only at this second stage that active interference in the processes of the development and production of instruments and apparatus begins, taking into account the historically established specialization and that which is taking place at the moment. This second stage will begin when the association begins to become financially autonomous, when it acquires the requisite experience of work under the new conditions and when it becomes financially stronger. But it is hard to picture right away the prospects of the new association--time will tell, but IAI will probably have its own design bureaus, service organizations and experimental production enterprises. All this infrastructure will be created on an international basis using the association's own resources.

[Question] Obviously all six participating countries--the USSR, Bulgaria, Hungary, the GDR, Poland and Czechoslovakia--will make their own creative contribution to the IAI's work. What will be the role of Soviet scientists and nuclear apparatus developers in the IAI's activity?

[Answer] Undoubtedly all the countries will take an active part in the IAI's work. I should note that Soviet nuclear apparatus is being developed and produced at a very high scientific and technical standard. Many instruments enjoy the deserved recognition of consumers. Many models have received medals and diplomas at international exhibitions and fairs. The Soviet apparatus for nuclear physics research, for example, is of great interest to our colleagues in the CEMA countries and in other countries of the world. At the moment we are doing intensive work on converting this apparatus for integrated electronics--the logic of the scientific and technical revolution demands this. This sort of apparatus includes multichannel analyzers, electronic physics apparatus, instruments for measuring currents and recording different types of radiation, for measuring their intensity and spectral composition, as well as other instruments used, in particular, in nuclear power.

Our gamma-ray therapy units, which are used in the treatment of patients with malignant tumors, for example, cobalt units, have a wide and fine reputation. We are almost the only country producing cobalt rotary convergence [rotatsionno-convergentnyy] units. In these units the movement of the radiation source takes the form of rotary and forward movements which permit a reduction in the amount of radiation received by the organism's healthy tissues.

Incidentally, we have now created a whole series of new gamma-ray therapy units, in particular, a new rotary unit which, we hope, will be most widely used--more widely than the rotary convergence unit I mentioned before which is of necessity mechanically complex and expensive to manufacture. USSR specialization also includes the creation of remote-controlled [distantionnyy] therapy apparatus. Outstanding statistical apparatus has been developed for radiotherapy and apparatus for intracavitary therapy.... There have been substantial successes in our country in the development and production of apparatus for activation [aktivatsionnyy] analysis. And this is only a small part of all we are rightly proud of. As for instruments to diagnose diseases, our Hungarian colleagues are specializing very successfully in their development and production. They are making good apparatuses and are constantly and successfully improving them.

Bulgarian scientists and designers, who are making creative use of the USSR's extensive experience accumulated in the creation of effective gamma-ray defectoscopes, have joined in the development and production of gamma-ray defectoscope apparatuses which the national economy needs so much.

[Question] Could you tell us, Andrey Mikhaylovich, about the nature of IAI's economic activity, for example, about the organization's budget and about the way in which it will conduct trade?

[Answer] I should like to draw your attention to the fact that the IAI is the first financially autonomous organization within the CEMA framework. This means that it must make a profit. Thus, in addition to technical tasks it has to solve economic tasks--exert an active influence on production by means of giving orders, without confining itself merely to setting requirements for the regulation of exports. Thus, IAI must be both a scientific and production and also a trade organization.

Since IAI has just been created it cannot, of course, have any profits or funds yet. Therefore, a decision has been made in accordance with which for the first 3 years the IAI member-countries will provide equal amounts of circulating capital for IAI. At the end of these 3 years the association will begin to operate exclusively on, so to speak, its own earnings. Calculations show that mutual trade turnover, which will be the main source of the association's capital, will increase considerably on the basis of specialization.

The growth of trade turnover will be promoted to a large extent by the IAI's formulation of proposals on specialization and the formulation of long-term--and this must be stressed in particular--contracts for the delivery of various types of equipment. The sale of instruments and apparatus produced in our country will be conducted in the normal way--through Soviet foreign trade organizations, in particular Tekhnabeksport which, incidentally, like the Izotop All-Union Association, is a member of the IAI.

We are convinced that the trade activity of the new CEMA economic organization will not be limited to the participating countries. The apparatus and instruments may be exported to third countries, including capitalist countries.

I should like to stress in particular that it is a question of the further development and strengthening of national economies, of the development and improvement of socialist economic integration and ultimately of raising the living standard of the peoples of the socialist countries. Such is the policy of the CPSU and the policy of the fraternal communist and workers parties of the countries of the socialist community.