

# **Information on the decisions of the March 2004 session of the JINR Committee of Plenipotentiaries**

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**96<sup>th</sup> session of the JINR Scientific Council  
3 June 2004**

## **Contents**

1	Information on the Decisions of the Committee of Plenipotentiaries .....	2
1.1	General Information .....	2
1.2	Scientific Programme in 2004 .....	3
2	Latest news in brief .....	5
2.1	JINR - BMBF Co-operation .....	5
2.2	Co-operation with South Africa .....	6
2.3	JINR – China Co-operation .....	6
2.4	Coordinating committees with the JINR Member States .....	6

Dear Members of the Scientific Council,  
Honorary guests,  
Colleagues,  
Ladies and Gentlemen:

On the first slide you can see the title of my traditional report to the summer session of the JINR Scientific Council.  
The main items of my presentation are the following:

- Information on the Decisions of the Committee of Plenipotentiaries.
- Latest News in Brief.

You have in your papers the JINR Annual report, both paper and electronic versions, as well as the latest issue of the “JINR News” journal where you can find information about the regular meeting of the Committee of Plenipotentiaries and the current activities of the Joint Institute. I believe you will have time to read all these documents. So, due to the time limit, I will report on the highlights of the CP meeting and the latest events that took place after the previous session of the Scientific Council in January.

Now let me pass to my talk.

## **1 Information on the Decisions of the Committee of Plenipotentiaries**

### **1.1 General Information**

A meeting of the Committee of Plenipotentiaries (CP) of the Governments of the JINR Member States was held in Dubna on 18 March 2004. At this session Mr. V.I. Nedilko, Plenipotentiary of Belarus, was re-elected Chairman of the Committee of Plenipotentiaries until the next session.

The list of reports and discussion items at the meeting of the Committee of Plenipotentiaries was the following:

#### **Committee of Plenipotentiaries**

- Directorate’s report  
V. Kadyshevsky
- Finances: status and plans  
V. Katrasev, V. Chmel
- Basic documents regulating JINR’s financial activity  
A. Ruzaev
- Election of the JINR Chief Engineer  
V. Kadyshevsky
- Organization of a committee for the election of the JINR Director  
V. Nedilko

The JINR Directorate’s report was devoted to the JINR’s activities, the implementation of the recommendations of the Scientific Council and of the decisions of the Committee of Plenipotentiaries in 2003 and plans for 2004. Victor Katrasev, the JINR Assistant Director for Economic and Financial Issues, and Vladimir Chmel from Belarus who is the Chairman of the Finance Committee in 2004, presented information concerning the financial policy and the JINR budget.

Based on the report presented by V. Katrasev, the Committee of Plenipotentiaries took note of the information on the execution of the JINR budget in 2003, approved the JINR budget for 2004.

The Committee of Plenipotentiaries resolved:

1. To take note of the information on the execution of the JINR budget in 2003:  
expenditure: US\$ 30,7530 million,  
income: US\$ 32,8375 million.
2. To approve the JINR budget for 2004 with expenditure of US\$ 38,063 million, the Member States’ contributions for 2004, the estimate of the budget for 2005 in income and expenditure amounting to US\$ 37,6 million.

Let me attract your attention to the fact that the income in 2003 was the largest volume during the last 13 years.

An important step was done for a new edition of the basic documents regulating JINR’s financial activities. A. Ruzaev, Chief of the JINR Budget and Financial Planning Department, presented these documents, which include amendments in the Institute’s Charter, Financial Protocol. The Committee of Plenipotentiaries opened these documents for signature by the Plenipotentiaries. The Committee of Plenipotentiaries approved also the text of the “Financial Regulations of JINR” and commissioned the Directorate to be guided by it in the financial activity.

I come back to the list of reports and discussion items at the meeting of the Committee of Plenipotentiaries. You see that the Committee of Plenipotentiaries elected G. Shirkov JINR Chief Engineer by open vote until completion of the term of office of the JINR Director.

Based on the information by the CP Chairman V. Nedilko on the organization of a committee for the election of the JINR Director, and after discussion, the Committee of Plenipotentiaries resolved to schedule the election of the JINR Director for the next CP meeting in March 2005.

The Committee of Plenipotentiaries resolved to set up the election committee composed of the representatives of Belarus, Mongolia, Poland, Russia, Slovakia and of the Chairman of the JINR Science and Technology Council. The Committee of Plenipotentiaries appointed the representative of Russia as Chairman of the election committee.

Members of this Committee are Professors Ts. Gantsog (Plenipotentiary of Mongolia), S. Dubnička (Plenipotentiary of Slovakia), N. Shumeiko (representative of Belarus), R. Sosnowski (representative of Poland), V. Matveev (representative of Russia) and I. Savin (the Chairman of the JINR Science and Technology Council).

The Committee of Plenipotentiaries commissioned the committee to prepare its proposals and to forward detailed information about the candidates and their programmes to the Plenipotentiaries not later than two months before the next session of the CP, also to work out recommendations concerning establishment of the position of the Scientific Leader of JINR, his status and mandate.

Taking into account the observations made by some members of the JINR Scientific Council at its 95th session, that “the corresponding scientific bodies of many laboratories elsewhere are chaired by scientists who are independent of the laboratory”, the Committee of Plenipotentiaries also commissioned the election committee to work out recommendations concerning the Chairman of the JINR Scientific Council.

A meeting of the election committee was held in Dubna yesterday.

Let me pass to the review of the CP decisions that have been made in connection with the JINR scientific programme presented in the JINR Directorate’s report.

## 1.2 Scientific Programme in 2004

The CP approved the recommendations of the 94th and 95th sessions of the JINR Scientific Council and the JINR Topical Plan of Research and International Cooperation for 2004.

I inform you that the JINR Directorate has planned funding in 2004 of the priority activities as recommended at the 95th session of the Scientific Council.

### Projects Funding

Field of activity	Number of projects	Funding, k\$
Theoretical physics	1	15.0
Elementary particle physics	12	738.5
Relativistic nuclear physics (including nuclotron)	4	186.0
Heavy-ion physics (synthesis & DRIBs)	4	868.0
Low- and intermediate-energy physics	5	172.0
Nuclear physics with neutrons (IREN)	1	120.0
Condensed matter physics (including IBR-2 modernization)	2	417.0
Radiation and radiobiological research	1	22.8
Networking, computing, computational physics	2	215.2
Educational programme	1	10.0
Total:	33	2764.5

This table demonstrates the projects funding. You see that the main part of the funds will be used for the basic facilities’ operation and development.

The Committee of Plenipotentiaries marked the following highlights of 2003:

- performance of topical theoretical and experimental studies, which have resulted in new significant scientific output enriching world science;
- experiments on the synthesis of new elements 115 and 113; activities for the construction of the ATLAS, CMS and ALICE detectors for CERN’s LHC;
- fulfilment of the schedule of operation of the Institute’s basic facilities in 2003: the total running time of the facilities was 14265 hours, which is the best data achieved over the last 12 years on users’ requests for experiments at the Institute’s reactor and accelerators;
- progress in the development and upgrade of the JINR basic facilities, including the successful acceleration of the iron beam at the Nuclotron, execution of the scheduled work on the construction

of the new movable reflector for the IBR-2 reactor, continuation of the assembly of the linear electron accelerator for the IREN facility as well as ongoing activity within Phase I of the DRIBs projects aimed at two experiments to be carried out in 2004;

– start of the Dubna International Advanced School of Theoretical Physics (project DIAS-TH) and the initiatives of the JINR University Centre for holding joint seminars in research centres of the Institute's Member States, which contributes to promoting JINR's educational and scientific activities within the international scientific community, among young scientists and students.

Let me comment some of these statements taking into account new results that were obtained during January – May this year.

#### The operation of the JINR facilities

Facility	1996	1997	1998	2000	2001	2002	2003	2004 (plan)
Nuclotron	375	508	558	949	1330	1850	2113	2500
IBR-2	2450	1850	2168	2073	2067	2113	681	1800
U400	1295	1365	3914	4953	5368	4885	6420	6100
U400M	1208	861	1989	2738	1367	2875	3246	3500
Phasotron	286	226	296	977	1516	1015	1805	2365
Synchrophasotron	246	345	321	384	645	354	0	0
IBR-30	2070	1269	593	1089	1326	0	0	0
<b>TOTAL:</b>	<b>7930</b>	<b>6424</b>	<b>9839</b>	<b>13163</b>	<b>13619</b>	<b>13092</b>	<b>14265</b>	<b>16265</b>

I mentioned at the previous session in January that the best results on operation of the JINR facilities were achieved in 2003. The tendency for increasing of the facilities' running time is being continued in 2004. The plan for this year is 16265 hours.

#### The operation of the JINR facilities in 2004

Facility	Data in hours	
	Plan for year	Actual for 5 months
<b>Basic facilities</b>		
Nuclotron	2500	794
IBR-2	1800	
U400	6100	2764
U400M	3500	1905
<b>Users' request facility</b>		
Phasotron	2365	590

This table with the data for 5 months illustrates that the plan for operation of the JINR facilities in 2004 has been implemented successfully.

More information in detail about operation and development of the JINR facilities is available, and you can ask G. Shirkov, the JINR Chief Engineer, about anything you are interested in.

Now I would like to speak about the news on the basic facilities since January till May.

The Frank Laboratory of Neutron Physics continued successfully the installation of the new movable reflector for the IBR-2 reactor. On 18 March (this day coincided with the first day of the meeting of the Committee of Plenipotentiaries) the reflector was moved from the testing area to the reactor hall. The testing start-up of the movable reflector at the permanent site was carried out at IBR-2 on 28 May. I stress that all work is being implemented in accordance with the schedule to start up the IBR-2 reactor by July 2004.

I would like to note that the Federal Agency for Atomic Energy in Russia (former Minatom) supports the IBR-2 modernization in accordance with the JINR - Minatom Agreement signed in 2000. The financial support of this Agency for the IBR-2 reactor modernization in 2004 is 10 million roubles, and 2 million roubles were paid already. The JINR's contribution in 2004 is planned in the volume of 10 million roubles too, and 2.7 million roubles were paid already.

More information about 20 years of exploitation of the IBR -2 reactor and experiments on neutron scattering in condensed matter research will be presented by Dr. V. Ananiev and Dr. A. Balagurov in their reports today afternoon.

Let me inform you also that within Phase I of the DRIBs projects two experiments using CORSET and MSP-144 are being prepared now at FLNR to start in October 2004.

You very well know about the long-standing and close cooperation between JINR and CERN. JINR has been successfully involved in many particle-physics research programmes at CERN for a long time and is now widely participating in the LHC project.

The various aspects of this collaboration were discussed during the visit to Dubna, on 16 April 2004, of the newly elected Director-General of CERN, Dr. R. Aymar, and of other members of the CERN management, Dr. N. Koulberg and Prof. J. Ellis.

CERN's delegation visited Laboratories of JINR where were informed about JINR activities and JINR's participation in the LHC projects.

Vice-Director Prof. A. Sissakian and I visited CERN on 26-28 April where we met Dr. R. Aymar and Dr. J. Engelen. We also visited the CMS testing area and the caverns for installation of ATLAS and ALICE. The CERN's officials emphasized that the JINR's obligations are being implemented in time with a high quality.

I am sure you know that JINR and CERN have several common educational projects including the organization of the European Schools of High-Energy Physics, conferences, workshops and exhibitions, in particular the joint exhibition "Science Bringing Nations Together".

I would like to inform you that the 2004 European School of High-Energy Physics is held in Spain now. 30 young scientists from the JINR Member States are participating in this school. Among the lecturers are Prof. A. Sissakian and Dr. D. Kazakov from BLTP. Dr. V. Bednyakov from DLNP is one of the discussion leaders.

The JINR Directorate looks forward to the continuation of the mutually beneficial cooperation between JINR and CERN, congratulates CERN on the 50th anniversary, celebrated this year, and wishes it much success in the future.

Concluding this section of my report I would like to mention highlights connected with education activities and conferences' programme.

There is a good tradition at the University Centre to organise visits to JINR by young people from different countries. For example, schoolchildren from Poland visited JINR on January, and schoolchildren from Germany and students from Poland visited the Institute on May. The photo of Polish students was made in the alley named after Henric Niewodniczanski. Undoubtedly, these contacts contribute to promoting JINR's educational and scientific activities within the international scientific community, among young scientists and students.

The new project "International Internet Magazine for School Students in Natural Sciences" was presented at the CP meeting in March. The project is realised jointly by BNL and JINR. Dr. Yu. Panebratsev is the leader of the JINR team. Considering the great importance of involvement of more talented young people in the Member States to science, the Committee of Plenipotentiaries recommended to continue the work on this project.

A very comprehensive conference programme is planned at JINR this year. The programme includes about 50 meetings, workshops and schools, and it is being implemented successfully.

Due to the time limit, I can mention only the Memorial Conference dedicated to Academician M. Markov. The Conference was successfully organized by the Bogoliubov Laboratory of Theoretical Physics together with the Institute for Nuclear Research of the Russian Academy of Sciences. The Conference was held 2 days in Dubna and Moscow and was attended by many famous scientists. I inform you also that the Scientific Council of the Institute for Nuclear Research unanimously awarded the Markov prize of 2004 to Academician Vladimir Lobashev (Russia) and Professor Ernst-Wilhelm Otten (Germany).

Let me attract your attention to the two future conferences. The JINR, the Russian Academy of Sciences, the Russian Ministry of Education and Sciences, and the Russian Agency for Atomic Energy will organise the Russian Particle Accelerator Conference (RuPAC) on October 4 - 8 in Dubna.

The Memorial Conference dedicated to the 95<sup>th</sup> anniversary of the outstanding theoretician N.N. Bogoliubov will be held on September 2 - 6 in Moscow and Dubna. I am inviting you to these conferences.

I would like to emphasise that the Regional Office for Science and Technology for Europe (ROSTE, the UNESCO Office in Venice, Italy) took a decision to support the Bogoliubov Conference. This decision was agreed during a visit of Mr Howard Moore, Director of ROSTE, and Mr Vladimir Kouzminov, Deputy Director of ROSTE, on 19 April 2004.

## **2 Latest news in brief**

Concluding my report, I will inform you about the latest news.

### **2.1 JINR - BMBF Co-operation**

The 14th annual meeting of the Coordinating Committee for the Implementation of the BMBF-JINR Agreement on Cooperation and Use of JINR Facilities was held in Dubna on 16-17 February 2004. The Committee was co-chaired by Professor P. Braun-Munzinger (GSI) and Professor A. Sissakian (JINR).

The JINR Directorate informed the Committee about the most important scientific results obtained at JINR in 2003. Both sides marked progress in the realization of joint projects.

It was suggested by BMBF to invest 950 thousand euro as the German contribution for supporting 25 common projects in 2004.

## **2.2 Co-operation with South Africa**

Important news concerns JINR relations with the Republic of South Africa.

Let me remind you that over the last decade there have been established scientific contacts between the Joint Institute for Nuclear Research and research centres in South Africa (SA). I informed you briefly about this co-operation at the previous session in January when the delegation of the Embassy of South Africa in Moscow headed by Ambassador Mr. M.J. Seekoe visited JINR and participated in the 95<sup>th</sup> session of the JINR Scientific Council.

A delegation of physicists and officials from the Department of Science and Technology of South Africa, which was headed by Dr. Neville Arendse, Chief Director, International Resources, Department of Science and Technology of South Africa, visited JINR on 11-12 February 2004.

The regular session of the Committee of Plenipotentiaries of the Governments of the JINR Member States, which was held on 18 March 2004, was attended by Mr Herman Jacobs, First Secretary of the Embassy of South Africa in the Russian Federation.

The Committee of Plenipotentiaries approved the proposal of the JINR Directorate concerning the conclusion of a co-operation agreement between the Joint Institute for Nuclear Research and the Department of Science and Technology of the Republic of South Africa.

Dr. Rob Adam, Director-General of the Department of Science and Technology, invited me to visit South Africa to continue discussions on collaboration of the Republic of South Africa with JINR.

A week ago I visited South Africa. I had meetings with Dr. R. Adam and Dr. N. Arendse, visited Universities in Pretoria, Johannesburg and Cape Town and “iThemba Labs” (Laboratory for Accelerator Based Sciences).

I met also Professor P. Steyn, President of the International Union of Pure and Applied Chemistry (IUPAC), and discussed with him new discoveries of superheavy elements at the Flerov Laboratory of Nuclear Reactions.

Considering the status of research at JINR, its technical equipment, and comparing it with similar institutions in South Africa, the Department of Science and Technology of the Republic of South Africa takes an interest in the following fields of investigation at JINR:

- theoretical nuclear physics,
- computational physics and information technologies,
- heavy ion physics,
- hadron therapy,
- nuclear physics with neutrons, including investigations in ecology,
- applied research,
- and university education in the relevant fields.

Dr. R. Adam informed me that the Agreement between JINR and South Africa will be signed in June – July during his visit to Russia.

## **2.3 JINR – China Co-operation**

A year ago I informed you about development of JINR’s relations with scientific centres in China. In March this year I sent a letter to I. Rogachev, Ambassador of Russia to China, with request to introduce more clarity into the position of the Chinese side on the re-establishing of the membership of the Chinese People's Republic at JINR, taking into account my meeting with Dr. Xu Guanhua, the Chinese Minister of science and technology, in Beijing on 9 September 2002.

In May I received a letter from S.N. Goncharov, the Minister-Counsellor at the Russian Embassy in China. He informed me that Mr Yu Minduo, head of the International Department of the Chinese Ministry of Science, and his deputy Zheng Shimin confirmed the willingness of China to improve links between JINR and research centres of China. A Chinese delegation is expected to visit Dubna in autumn. In the JINR Scientific Council, China is represented by Prof. Chen Hesheng from the Institute of High Energy Physics in Beijing. I believe that his assistance will be very useful in developing the participation of Chinese scientists in the JINR research programme.

## **2.4 Coordinating committees with the JINR Member States**

It has been a tradition to organize Coordinating Committees on Collaboration of the Joint Institute for Nuclear Research with scientific centres of the JINR Member States.

Concluding my report, I inform you about three meetings which have been held in Prague, Bratislava and Minsk.

A meeting of the JINR-Czech Committee was held on 22 March in Prague, and a meeting of the JINR-Slovak Committee was held on 24 March in Bratislava. JINR Director V. Kadyshevsky, Vice-Director Ts. Vylov, FLNR Director M. Itkis, UC Director S. Ivanova and FLNR Deputy Director J. Kliman presented the JINR Delegation.

A meeting of the JINR-Belarus Committee was held on 13 March in Minsk. JINR Vice-Director A. Sissakain, JINR Assistant Director for Economic and Financial Issues V. Katrasev, JINR Directorate Advisors I. Golutvin and N. Russakovich presented the JINR Delegation. Prof. Yu. Pleskachevsky, Chairman of the Belarus State Committee on science and technology, met the JINR Delegation.

Let me emphasize that very fruitful discussions on the status of our relations and of plans for the future took place during all these three coordinating committees. The JINR Directorate will support the activities on coordination of the research programmes of JINR and its Member States.

So much for the information I wanted to present.

Thank you very much for attention.