RESTRUCTURING OF THE SCIENTIFIC RESEARCH INSTITUTES FORMERLY SUBORDINATED TO THE RUSSIAN ACADEMY OF SCIENCIES: AN ASSESMENT OF CHANGE

I.Dezhina

Over the past 11 months of 2014, some measures designed to reform the network of scientific research institutes formerly subordinated to the Russian Academy of Sciences were elaborated, a number of conflict-triggering decisions were made, and several new development priorities were put forth. The most alarming prospect in this connection is the possibility of the existing scientific research institutions being restructured prior to an assessment of their actual performance level. The most active representatives of the scientific research community responded to these developments by promoting greater independence of research departments and laboratories within the existing institutes – that is, adopting the same strategy that had been practiced in the early 1990s, at the time of rapid and fundamentally destructive developments in the field of science. Those of them who are more passive have also been resorting to the widespread practice of the early 1990s – they look for jobs in foreign countries. Over the first 8 months of 2014, the outflow of human resources from this country exceeded that recorded for every full year over the last one-and-a-half decade.

In October and November 2014 it was expected that the RF Government should take some important decisions concerning the mechanisms to be applied in the course of further reform in the scientific research sector, and primarily in reforming the system of research institutes that used to be part of the Russian Academy of Sciences system and now are subordinated to the Federal Agency for Scientific Organizations (FASO). Besides, the RF Government was to establish a scientific research coordination council under the FASO and a commission for assessing the performance levels of scientific research institutions, approve the relevant assessment methodologies, and issue regulations for the Russian Academy of Sciences (RAS) to participate in expert estimations and perform the other functions assigned to it.

However, the decision-making process has proved to be longer than expected, one of the causes of delay – by no means the least important one – being the difficulty of coordination between the tiers of the new administrative structure. The nearly decade-long conflict between the Russian Academy of Sciences and the RF Ministry of Education and Science (RF MES) seems to have been resolved at last; however, recently one more government department has emerged – the Federal Agency for Scientific Organizations (FASO), which represents yet another tier to negotiate with during the coordination procedure. The functions of all these organizations somewhat overlap, the relations between them have become more complicated, and one manifestation of the resulting tension is that they go public about their mutual dissatisfaction. Thus, the Academicians are displeased by the failure to establish a scientific research coordination council under the FASO. In their opinion, the FASO has increased the bureaucratic pressure on research institutes, its activity is not transparent to the public, and its officials have little understanding of the specificity of scientific research[1]. The FASO's CEOs criticize the RAS for being passive and failing to submit its proposals concerning the reinstitution of the existing network of scientific research institutes[2], while at the same time making some poorly substantiated decisions, for example, the heads of the RAS, without consulting the directors of research institutes, gave their consent to the transfer of 42 selection centers of the former Russian Academy of Agricultural Sciences to the RF Ministry of Agriculture, and the transfer of a number of clinics to the RF Ministry of Healthcare[3]. According to the relevant specialists, these are the best research institutes, which after being transferred will be reoriented

1 *Rossiiskaia akademiia nauk. Protokol reshenii Biuro Soveta direktorov institutov*. [Russian Academy of Sciences. Minutes of the Decisions of the Council of Directors of Institutes]. No 5 of 17 September 2014; *God khlopot. Chto prinesla reforma Rossiiskoi Academii nauk?* [A Year of Troubles and Turmoil. What Has the Reform Brought for the Russian Academy of Sciences?] // Poisk, No 27–28, 11 July 2014. See http://www.poisknews.ru/theme/ran/11060/

2 Yu. Medvedev. *Instituty RAN mogut ob"edinit' s vuzami i 'otraslevikami'* [The RAS Institutes May Be Merged with Higher Educational Establishments and Branch Departments] // *Rossiiskaia gazeta* [The Russian Gazette], 14 October 2014. See http://www.rg.ru/2014/10/14/ran-site-anons.html

3 N. Volchkova. *Okonchen blits. Startuet ocherednoi etap reformy RAN* [The Blitz Is Over. The Next Phase of the RAS Reform Is Imminent] // *Poisk* [Search], No 42, 17 October 2014. See http://www.poisknews.ru/theme/ran/12131/

to some other fields of research, and the agricultural selection field will thus be destroyed[1].

For their part, the CEOs of the RF Ministry of Education and Science express their dissatisfaction with the Academy's lack of activity and failure to elaborate new provisions on expert estimation procedures, fundamental research coordination procedures for the entire country, and other much-needed regulations[2]. Moreover, the trade union of the RAS' personnel accuses of the RAS top officials of abstaining from any participation in the process of decision-making with regard of the future of Russian science[3]. The scientific researcher community, including non-governmental organizations, have also expressed their concerns as to the current state of affairs in the field of science.

All these developments are taking place with a view towards the approaching expiry, on 15 January 2015, of the moratorium on transactions involving the RAS' properties and decisions on concerning the staff of research institutes formerly subordinated to the RAS. Evidently, as seen by the results achieved over the past 11 months, the time allotted to preparatory work has not been employed to the best possible advantage.

Such a situation can be explained by a number of objective reasons: the RAS has never been a very mobile entity, the FASO indeed lacks experience in the field of academic science, and there do exist some coordination issues between the RF Ministry of Education and Science and the FASO. At the same time, the very idea of making the administrative structure more complex and 'heavy' has so far proved to be counterproductive, as the year-long experience of management under the new rules has clearly demonstrated. As far as the management of Russia's science sector is concerned, interdepartmental coordination has never been its true strength. As a result, scientists and research institutes will evidently fall victim to the present tricky and confused situation, as the risk of last-moment rash decisions is now very high.

As of today, the most alarming development is the currently practiced approach to handling these transformations, which combines the estimation of performance of scientific research institutions with the actual restructuring of institutes formerly belonging to the RAS. The probability of their restructuring taking place prior to the completing of their performance estimation is very high indeed. The timing itself of these two undertakings appears to be absurd.

The discussion of the criteria and methods to be applied in the performance assessment of scientific research institutions has been underway for a long time already. Last year, the RF Ministry of Education and Science submitted to the government department for their consideration the model assessment methodology that it had specifically developed; in this connection, experts' sessions with the directors of research institutes (mostly those belonging to the RAS)[4] were held, the methodology was adjusted, but an overwhelming majority of government agencies, the FASO including, failed to produce their own assessment provisions. The online voting for candidates from the research institutes to be included in the performance assessment commission started only as late as mid-November 2014. The commission is to review the performance of research institution subordinated to the FASO, and its composition is to be approved by mid-December 2014. Evidently, the assessment procedure itself will be get underway no earlier than 2015, and there is a risk that it will be done in haste. At the same time, world practices suggest that this is a big undertaking, and so the appropriate period will be no less than 2–3 years.

For its part, the FASO was prompt in elaborating several variants of restructuring the scientific research institutions subordinated to it, suggesting a total of four new organizational forms differing by their goals and the specificity of their activities[5]. These are as follows:

Federal research centers (FRC), to be created by way of merging several institutes for the purpose of implementing breakthrough research and development projects in strategically important fields. FRCs should be responsible for achieving valid results in accordance with the established national top priorities.

National research institutes (NRI), to conduct fundamental research. These are to be established on the

1 *Setevaia forma zhizni nauchnykh institutov* [The Network-based Lifestyle of Scientific Research Institutes] // *Nezavisimaia gazeta – nauka* [The Independent Gazette – Science], 22 October 2014. See http://www.ng.ru/science/2014-10-22/10_fano.html

2 *'Nauka – zona riska'. Zamglavy Minobrnauki Liudmila Ogorodova o reforme RAN, dissovetakh, izmeneniiakh v rabote uchenykh i ne tolko* [Science Is a Risk Zone'. Deputy Head of the RF Ministry of Education and Science Liudmila Ogorodova on the RAS Reform, Dissertation Councils, Changes in the Everyday Activities of Scientists, and other Matters] // Lenta.ru, 27 October 2014. See http://lenta.ru/articles/2014/10/27/ogorodova/

3 N. Volchkova. *Okonchen blits. Startuet ocherednoi etap reformy RAN* [The Blitz Is Over. The Next Phase of the RAS Reform Is Imminent] // *Poisk* [Search], No 42, 17 October 2014. See http://www.poisknews.ru/theme/ran/12131/

4 For further detail, see I. Dezhina. *Razrabotka sistemy otsenki effektivnosti nauchnykh organizatsii kak prodolzhenie bystrykh reform* [The Development of a System for Performance Assessment of Research Organizations as a Continuation of Rapid Reforms] // Russian Economic Developments, No 6, 2014. P. 42–44. http://www.iep.ru/files/text/RED/2014/Russian_Economic_Developments_06_2014.pdf

5 Proposals for structuring the network of research organizations subordinated to the FASO of Russia. 14 August 2014. See https://www.ras.ru/news/shownews.aspx?id=80e8ca07-f737-4699-a91a-8ffe6a3e80df

basis of the existing institutes in the RAS system, which are leaders in research in their specific fields.

Federal scientific centers (FSC) are primarily oriented to innovation and essentially are technology platforms. Consequently, their main goal is to develop and assist in the implementation of production modernization technologies.

Regional scientific centers (RSC) are to have as their primary goal the comprehensive development of territories and regions, including the development of specific branches of industry. These are to be created by way of merging the scientific research institutes situated in one and the same territory.

As follows from this list, the proposed transformations are directed in the main towards enlarging the existing institutions and reducing the number of those involved primarily in fundamental studies. The idea of reorientation of the existing institutes towards applied research is by no means indisputable. In view of the available human resources it may be more feasible to set up new institutes for applied studies rather than to retrain the research staff inexperienced in applied research. Meanwhile, according to its plans to be implemented by late 2014, the FASO intends to define the main parameters of the future federal research centers, federal scientific centers, national research institutes and regional scientific centers, as well as to develop pilot integration projects. The FASO has already earmarked the priority fields to its pilot projects, although it is not clear which principles were applied in selecting those fields. These priority fields are medicine, life sciences, power engineering, agricultural technologies, and foodstuffs.

It is noteworthy that the RAS CEOs were prompt in taking to the idea of 'institutional enlargement' to be accomplished prior to the performance assessment of the existing institutes. Various institutions and RAS branches began to put forth their own versions of restructuring the Academy's former institutes[1]. The most hotly disputed was the idea put forth by Secretary General for Science of the Presidium of the RAS Academician Igor Sokolov that a federal research center for information and communication technologies should be created on the basis of the Institute of Informatics Problems where he is currently director. That idea was proposed without any prior consultations with the directors of other relevant institutes, which are to be merged with the newly created organization[2]. In fact, these developments can be described as attempts to save 'their own' institutes undertaking by those functionaries who have at their disposal the necessary administrative resources.

These efforts have not been made in vain: four pilot projects were backed by the RF President's adviser on education and science Andrei Fursenko[3] (one of them being Academician Igor Sokolov's project), and it is not known which criteria had actually been applied in their selection. The priorities for these projects are somewhat different from those proposed by the FASO, namely agricultural sciences, molecular genetics and cell biology, industrial biotechnologies and software development. It can be expected that these were be the first pilot projects to be launched.

Such spontaneously selected priorities point to the absence of any well-coordinated government standpoint as to what is really important for Russia's current development. Over the past year, lots of new priorities have emerged in the field of research and development, and they sometimes very far depart from what the President believes to be important for the development of science and technologies in Russia.

On the whole, the general trend observable in the recently adopted decisions point to their orientation towards reducing the amount of federal budget allocations to research and development. This is the real reason for the proclaimed 'optimization' and the launch of pilot projects in accordance with some arbitrarily set priorities (in truth, their purpose is to keep afloat the 'indispensables'). All these activities are unlikely to conduce to an efficient implementation of the much-quoted May 2012 Executive Orders of the President of the Russian Federation, where it is stipulated that, among other things, by 2015 Russia's WEB of Knowledge index should be increased to 2.44%[4].

1 Some examples are the proposals to create a federal research center on the basis of the Kemerovo Research Center of the Siberian Branch of the RAS, to establish the Northeast Regional Scientific Center of the Russian Academy of Agricultural Sciences (Source: Setevaia forma zhizni nauchnykh institutov [The Network-based Lifestyle of Research Institutes] // Nezavisimaia gazeta – nauka [The Independent Gazette – Science], 22 October 2014, see http://www.ng.ru/science/2014-10-22/10_fano.html), and to establish a comprehensive interdisciplinary inter-branch center for research, education and innovation technologies of the Novosibirsk State University and the Siberian Branch of the RAS (Source: Kolesova O. Predchuvstvie stikhii. Akademicheskim NII predlozheno iskat' puti k spaseniiu [In Anticipation of Chaos. The Academic Research Institutions Have Been Asked to Look for Their Own Ways to Salvation] // Poisk [Search], No 40, 3 October 2014. See http://www.poisknews.ru/theme/ran/11977/).

2 M. Gelfand. *Pervyi poshel* [The First One Is on the Go] // *Troitsky variant – nauka*, No 162, p. 1. 9 September 2014. See http://trv-science.ru/2014/09/09/pervyjj-poshel/

3 Andrei Fursenko's leter to President of Russia Vladimir Putin, Pr-2349 of 1 October 2014. Source: *Troitsky variant – nauka*, No 166, p. 2. 4 November 2014. See http://trv-science.ru/2014/11/04/shef-vsjo-propalo-2/

4 Executive Order of the President of the Russian Federation of 7 May 2012, No 599 'On Measures to Implement Government Policy on Education and Science. See http://www.rg.ru/2012/05/09/nauka-dok.html

After such restructuring, this result will be unachievable for some years to come, let alone by 2015. In newly merged institutes the process of mutual adaptation of staff formerly belonging to quite different research groups will take a long time, and productivity is unlikely to be increased during the transition period.

As of today, we may already observe the response of the scientific researcher community to all these developments. Its most active representatives are attempting, through their participation in non-governmental organizations and councils, somehow to mitigate and rationalize the arbitrary administrative decisions, and so they gradually are adopting the same strategy that had been practiced in the early 1990s, at the time of rapid and fundamentally destructive developments in the field of science. The basic idea is to increase the independence of research departments and laboratories within the existing institutes[1]. When the whole system is collapsing, survival is easier for small separate groups. Those of them who are more passive have also been resorting to the widespread practice of the early 1990s – they look for jobs in foreign countries[2]. Over the first 8 months of 2014, the outflow of human resources from this country exceeded the corresponding index for every full year over the last one-and-a-half decade. The bulk of these emigrants are scientific researchers and entrepreneurs[3].

1 *Sovet po nauke: pozitivnykh izmenenii v institutakh poka ne nabliudaetsia* [The Academic Board: No Positive Changes Have Been Observed in the FASO's Institutes]. 22 October 2014. See http://sovet-po-nauke.ru/info/22102014-decision

2 *'Delo sovsem ne v megagrantakh'. Vitse-prezidenty RAN o novom pokolenii uchenykh* ['It Has Nothing to Do with Mega-grants'. The Vice-presidents of the RAS on the New Generation of Scientists] // Lenta.RU. 30 October 2014. See http://age.lenta.ru/generation/articles/2014/10/29/kozlov/

3 E. Mereminskaia. *Emigranty novoi volny. Iz Rossii stali bol'she uezzhat'* [The New Wave Emigrants. More People Are Leaving Russia] // Gazeta.RU. 1 November 2014. See http://www.gazeta.ru/business/2014/10/30/6282685.shtml