The aspects of a draft model of international scientific and technical cooperation of the International Center for Neutron Research PIK

T K Gulyaeva¹, T S Zaplatina¹ and N N Nurahov²

¹ Kutafin Moscow State Law University (MSAL), Moscow, 125993, Russian Federation
² NRC «Kurchatov Institute», Moscow, 123182, Russian Federation

goulyaeva.tatiana@gmail.com

Abstract. Analysis of the existing «megascience» projects, such as the Joint Institute for Nuclear Research (JINR) in Dubna (the Russian Federation) and the European Spallation Source (ESS) in Lund (the Kingdom of Sweden) allows to conclude that one of the most suitable legal forms for the ICNR PIK would be an international intergovernmental organization (IGO). Legal status of the IGO would provide an international participation in the functioning of the ICNR PIK within the territory of the Russian Federation on the grounds of member or observer status or conclusion of bilateral and multilateral agreements on specific science programs and research studies. To conclude, the IGO is the most suitable organizational and legal form for the ICNR PIK. The establishment of the ICNR PIK will contribute to further integration of the Russian science in the global scientific research community and will expand the scope of cooperation of the Russian Federation in the international arena.

1. Analysis of the JINR as a draft legal and organizational form for the ICNR PIK

The current initiatives on internalization of research strategies and projects determined essential necessities to form a model of international scientific and technical cooperation and examine its legal aspects in order to achieve mutually beneficial international interaction between the representatives of the Russian Federation and other foreign countries [1]. The prominent examples of such initiatives are considered to deal with the functioning International Thermonuclear Experimental Reactor (ITER) and the European Organization for Nuclear Research (CERN), as well as the initiated implementation of the mega science projects [2]- the International Center for Neutron Research of the PIK. For the time being it is required to elaborate a unified approach to the choice of the proper organizational and legal form of mega science project (the ICNR PIK) for further international participation within the boundaries of the Russian Federation.

An international intergovernmental organization (hereinafter referred to as the IGO) is considered to appear the most rational and useful organizational and legal form for the ICNR PIK. The Russian Federation has already gained and accumulated some practical experience with regard to the rules and procedures on establishment. Thus, the Joint Institute for Nuclear Research (JINR) was created in the form of the international intergovernmental research organization within which the mega science project NICA is being carried out in Dubna (the Russian Federation).
An IGO is an organization composed primarily of sovereign states that is founded under international public law and by treaty or other constitutive instrument and set up for a variety of specific purposes, namely scientific and technical cooperation [3].

The legal status of IGO concerns the following:

1. Creation under international public law:
   - IGOs' activities are to be carried out in accordance with generally accepted principles and norms of international law;
   - a charter of the IGO is subject to registration with the UN Secretariat (Article 102 of the UN Charter)
2. Cooperation in specific areas of activity:
   - IGOs' activities are to be based on the principle of transparency for further participation of all interested states and its proactive, equal and mutually beneficial cooperation
3. Possession of international legal personality:
   - in particular, the right to conclude international agreements and to have observers in other international organizations which activities correspond to the statutory goals and objectives of the IGO;
4. Status of a legal entity. The legal status of the IGO is determined by the relevant international treaty, charter and a separate agreement between the IGO and a state, the territory of which will be the seat of the organization. For instance, the legal status of the JINR is set out in the Convention on the establishment of the JINR and its Charter. Furthermore, IGOs are allowed to develop its own internal rules that aim at regulating its activities (Regulation for the organization of experiments conducted by international collaborations using the capabilities of the JINR basic facilities and the JINR Code of Professional Ethics).

Participation of the international partners in this particular type of IGO could be fulfilled on the basis of the following forms:

- membership status;
  - Membership is defined by an international agreement and the charter of the IGO. Member States of the organization are entitled to participate in the financing activities and possess equal management rights.
  - bilateral or multilateral agreements on participation in the separate scientific research programmes being undertaken by international scientists.

In this case, the abovementioned instruments constitute the legal basis for the participation in the scientific activities of IGOs of several subjects, inter alia, sovereign states, international organizations, national research institutions and individual scientists that aren't members of the IGOs. The scope of joint cooperation, mutual obligations of the parties, etc. are set out in the agreements as well.

- observer status:
  - It allows, in the prescribed manner, to participate in the work of the IGOs supreme bodies in order to exchange information, organize cooperation and coordinate activities.
  - Financing of the IGOs' activities is generally determined by its charter and financial protocol. The budget formulation is set up by means of its own or attracted funds. IGOs' funds are formed from the sources such as contributions of member states in the appropriate currency (the cost of shipped equipment, instruments, materials, services and work fulfilled may be accepted on account of their contributions); special financing of scientific projects, bank credits and loans; funds obtained according to the protocols on scientific and technical co-operation; profits from economic and commercial activities.

2. Analysis of the ESS a draft legal and organizational form for the ICNR PIK
It is thus useful to address to the organizational and legal form of the European Spallation Source (hereinafter referred to as ESS) and to analyze the opportunity of direct membership and other diverse forms of participation in the functioning of the ESS.
The ESS as a European Research Infrastructure Consortium (European Spallation Source ERIC) (hereinafter referred to as ERIC) was created by the decision of the European Commission on the basis of the provisions of the Treaty on the Functioning of the European Union of 1957 and the Council Regulation (EC) No. 723/2009 of June 25 2009 'Legal basis for the European Research Infrastructure Consortium in the Community'.

The ESS was originally created to operate as a Swedish limited liability company (Reg. No. 556792-4096). However, on 4 September 2014 after consulting with all partners countries the Government of Sweden jointly with the Government of Denmark have agreed to submit an application to the European Commission to establish the ERIC in accordance with the Article 5 of Council Regulation (EC) No. 723/2009 and to transform the ESS into the ERIC, i.e. the EU legal framework, the main task of which was to facilitate the establishment and operation of research infrastructure that would support multinational cooperation.

Therefore, a new legal framework (the ERIC) was proposed in the form of international legal entity with legal personality and full legal capacity under EU Law recognized in all EU member states.

The principal task of the ERIC corresponds to the establishment and operation of a research infrastructure on a non-economic basis.

As for the legal status of the ERIC, it is a legal entity with legal personality that could also be considered as an international organization. Moreover, the ERIC has the most extensive legal capacity granted to the legal entities under the national law of member states.

A comprehensive list of actors eligible to act as members of an ERIC is provided in Article 9 of Council Regulation (EC) No. 723/2009. The members of an ERIC may be the following:

- EU member states;
- associated countries (within the European Community Framework Programme for Research, Technological Development and Demonstration Activities);
- third countries other than associated countries;
- intergovernmental organisations (it's worth mentioning that the ICNR PIC may become a member of the ESS if it is established in the form of this particular IGO).

The minimum quantity of members accounts for at least three EU member states in order to maintain the continued presence of the EU. In addition, the EU member states hold jointly the majority of the voting rights in the assembly of members.

It bears pointing out that other EU member states may obtain a membership status or may join as an observer without voting rights at any time and on fair and reasonable terms specified in the ERIC Statute.

Further accession of associated countries and third countries other than associated countries, including intergovernmental organizations, to the ERIC is subject to the approval by the assembly of members.

Any EU member state, associated country or third country may be represented by one or more government agencies, including regions or private organizations with a public service mission, for further accomplishment of specified rights and obligations that are provided for ERIC members.

Council Regulation (EC) No 723/2009 determines the minimum requirements regarding an ERIC Charter (Article 10), which can be taken into account in case of developing the ICNR PIC's own statutory document:

1. A list of members, observers and of institutions representing members as appropriate.
   The presence of observers isn't regarded as an obligatory prerequisite for the reason of functioning of the ERIC.
   The institutions representing the members at the time of the set up of the ERIC should be listed in the statutes.
   Nevertheless, modifications of the list of observers or institutions representing the members do not necessarily entail an immediate amendment to the statutes, provided that a totally different mechanism for notification of changes of representation is prescribed.

2. The tasks and activities of the ERIC;
3. The location or statutory seat.
   The headquarters of the organization should be located in the territory of a member state or an associated country.

4. The name;

5. The duration and winding-up procedures;

6. The liability regime;

7. The basic rules regarding the following (it might be contained in separate internal documents):
   - the access policy for users;

8. The rights and obligations of the members, including the obligation to pay contributions to a balanced budget and voting rights;

Concerning the ESS itself, The Article 2 of the Statutes of the ESS determines a wide range of its main tasks and activities:

- the conduction of the high-level research, technological development, innovation policy;
- the full scientific exploitation of the ESS;
- the grant for an effective access to stakeholders (users);
- the dissemination of scientific data;
- the optimal use of resources and know-how (trade secrets) etc.

The ICNR PIK can participate in the ESS activities, only being in the status of a third country or an intergovernmental organization. In the latter case, the ICNR PIK should be set up in the above considered form of the IGO.

The rights and obligations of the members include the following:

- an open access to the ESS for its scientific community;
- the right to attend and vote at the Council meetings. However, the voting right doesn't allow to vote in a matter concerning that member's termination of its membership.

The founding member states can pay in-kind or cash contributions towards the construction costs.

Each member pays contribution towards the construction and operating costs and the decommissioning costs. It should be noted that an observer status does not allow to obtain such powers. Thus in case of the ICNR PIK's intention to pay either cash or in-kind contribution it is useful to acquire the membership status of the ESS.

3. Conclusion

To conclude, the IGO is the most suitable organizational and legal form for the ICNR PIK comparing to the ESS ERIC due to the fact that the IGO is created under international public law and all its activities are to be carried out in accordance with generally accepted principles and norms of international law. Thus, the establishment of the ICNR PIK will contribute to further integration of the Russian science in the global scientific research community and will expand the scope of cooperation of the Russian Federation in the international arena.

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