CLASSIFICATION AND SYSTEMATIZATION OF STRUCTURE OF BELARUSIAN EDUCATIONAL AND RESEARCH PORTAL OF NUCLEAR KNOWLEDGE

Sytova S.N.¹, Charapitsa S.V.¹, Dubovskaya I.Ya.², Lobko A.¹, Savitskaya T.A.²

¹Research Institute for Nuclear Research of Belarusian State University, Minsk, Belarus; ²Belarusian State University, Minsk, Belarus E-mail: sytoyal@inp.bsu.by

Since beginning of the XXI century the International Atomic Energy Agency (IAEA) gives big attention to the nuclear knowledge management (NKM) [1]. Nuclear knowledge (NK) base stems from both research and development as well as industrial applications of nuclear technologies and includes energy and nonenergy applications. Knowledge management (KM) is an integrated, systematic approach to identifying, acquiring, transforming, developing, disseminating, using, sharing, and preserving knowledge, relevant to achieving specified objectives. Approximate percentage of NK subject area by the IAEA is the next: nuclear physics 11%, nuclear materials 9%, engineering and instrumentation 9%, elementary particle physics 16%, atomic, molecular and condensed matter physics 10%, life sciences 18%, chemistry 4%, nuclear power and safety 6%, nuclear fuel cycle and radioactive waste 3%, fusion research and technology 7%, environmental and earth sciences 3%, isotopes 1%, non-nuclear energy 1%, economic, legal and social 2%.

The strategy of the IAEA in NKM is the following. It is extremely important that the educational process involves the enterprises of nuclear industry. Great attention is paid to creation and development of educational networks and portals, both national and regional, providing platforms for education and training, transfer of skills and experience, exchange of best practice across companies, development of nuclear technology etc.

Belarus now joins the club of countries that have or are building nuclear power plant. Our country has a large scientific potential in the field of atomic and nuclear physics. There are several websites of selected organizations and institutions in Belarus that are not related to the united portal, providing separate information on the subject that is far from completeness. It is obvious the necessity of creation of portal of nuclear knowledge. The purpose of its creation is the accumulation and development of knowledge in the nuclear field as well as popularization of nuclear knowledge for the general public. Creating of a full-fledged portal of nuclear knowledge is the multi-stage process. As the first step it is proposed to create educational and research portal of nuclear knowledge.

In this report, classification and systematization of structure of educational and research portal of nuclear knowledge are presented and discussed.

 International Atomic Energy Agency. Knowledge Management for Nuclear Industry Operating rganizations, IAEA-TECDOC-1510. 2006. P.185.