

## **PROBLEMS OF DEVELOPMENT OF THE MAIN PROFESSIONAL EDUCATIONAL PROGRAM OF THE HIGHER EDUCATION IN THE FIELD OF 21.03.03 GEODESY AND REMOTE SENSING (BACHELOR DEGREE) ACCORDING TO FGOS 3++ TAKING INTO ACCOUNT PROFESSIONAL STANDARDS**

*Alexander P. Karpik*

Siberian State University of Geosystems and Technologies, 10, Plakhotnogo St., Novosibirsk, 630108, Russia, D. Sc., Professor, Rector, phone: (383)343-39-37, e-mail: rector@ssga.ru

*Sergey V. Sereдович*

Siberian State University of Geosystems and Technologies, 10, Plakhotnogo St., Novosibirsk, 630108, Russia, Ph. D., Director, Institute of Geodesy and Management, phone: (383)343-27-09, e-mail: s.v.seredovich@sgugit.ru

*Irina G. Ganagina*

Siberian State University of Geosystems and Technologies, 10, Plakhotnogo St., Novosibirsk, 630108, Russia, Ph. D., Associate Professor, Head of Department of Space and Physical geodesy, phone: (913)956-46-42, e-mail: gam0209@yandex.ru

The analysis of the professional standards given in the appendix of the project of the updated federal state educational standard of the higher education in the field of 21.03.03 Geodesy and Remote Sensing is carried out. The conclusion is drawn that in a number of professional standards or main types of geodetic activity are not specified, either the generalized labor functions in an explicit form do not have geodetic orientation, or the geodetic directions of preparation and specialty according to OKSO are not specified. The program of a bachelor degree according to FGOS 3++ cannot be limited to substantially provided professional standards. It is necessary to develop professional standards taking into account types of professional activity and generalized labor functions at the solution of scientific and production problems of geodesy for formation of professional competences.

**Key words:** professional standards, main educational program, FGOS 3++, standard and legal documents, Geodesy and Remote Sensing, activity geodetic, generalized labor functions, qualification level.

### **REFERENCES**

1. Methodical recommendations on updating the current federal state educational standards of higher education, taking into account the adopted professional standards (approved by the Ministry of Education and Science of the Russian Federation on January 22, 2015 No. DL-2/05vn). Retrieved from ConsultantPlus online database [in Russian].

2. Federal Law No. 122-FZ of 02.05.2015. On Amendments to the Labor Code of the Russian Federation and Articles 11 and 73 of the Federal Law "On Education in the Russian Federation". ConsultantPlus online database [in Russian].

3. Professional standards. (n. d.). Retrieved from <http://profstandart.rosmintrud.ru/obshchiy-informatsionnyy-blok/natsionalnyy-reestr-professionalnykh-standartov/reestr-professionalnykh-standartov/>

4. Order of the Ministry of Labor and Social Protection of the Russian Federation of September 29, 2014 No. 667n. On the register of professional standards (list of types of professional activity). ConsultantPlus online database [in Russian].

5. The VO FGOS projects in the directions of a bachelor degree. (n. d.). Retrieved from <http://fgosvo.ru/fgosvo/142/141/16/21>.

6. Decree of the Government of the Russian Federation of January 22, 2013 No. 23. On the rules of development and approval of professional standards. ConsultantPlus online database [in Russian].

7. Order of the Ministry of Labor and Social Protection of the Russian Federation of April 12, 2013 No. 148n. On approval of qualification levels for the development of projects of professional standards. ConsultantPlus online database [in Russian].

8. Order of the Ministry of Labor and Social Protection of the Russian Federation of April 29, 2013 No. 170n. On approval of guidelines for the development of a professional standard. ConsultantPlus online database [in Russian].

9. Order of the Ministry of Labor and Social Protection of the Russian Federation dated April 12, 2013 No. 147n. On approval of the layout of the professional standard. Retrieved from ConsultantPlus online database [in Russian].

10. Karpik, A. P. (2014). Basic principles of modern university establishment and development. In *Sbornik materialov Mezhdunarodnoy nauchno-metodicheskoy konferentsii: Aktual'nye voprosy obrazovaniia. Sovremennye tendentsii formirovaniia obrazovatel'noi sredy tekhnologicheskogo universiteta [Proceedings of International Scientific and Practical Conference: Topical Issues of Education. Modern Trends Shaping the Educational Environment Technological University]* (pp. 3–4). Novosibirsk: SSGA Publ. [in Russian].

11. Pilipenko, S. A. etc. (2016). Combination of FGOS and professional standards: the revealed problems, possible approaches, recommendations about updating. *Vysshee obrazovanie v Rossii [Higher Education in Russia]*, 6, 6–16 [in Russian].

12. Tantsura, N. P., & Valdaytseva E. A. (2018). Experience of the new generation FGOS projects creation of and the approximate main educational program of specialist programs on the basis of professional standards. In *Sbornik statej VII mezhdunarodnoj nauchno-prakticheskoy konferencii: No. 2(6). Sovremennaya psihologiya i pedagogika: problemy i resheniya [Collection of Articles of the VII International Scientific-Practical Conference "Modern Psychology and Pedagogy: Problems and Solutions. No. 2(6)]* (pp. 46–57). Novosibirsk: SibAK Publ. [in Russian].

13. Martynov, G. P., Yankelevich S. S. (2018). Optimization activities of the scientific and teaching staff with the introduction of professional standards in the universities of the Russian Federation. *Vestnik SGUGiT [Vestnik SSUGT]*, 23(3), 267–278 [in Russian].

Received 18.04.2019

© A. P. Karpik, S. V. Seredovich, I. G. Ganagina, 2019