Innovations in the electronic payment system

© E.N. Lobachova, V.G. Rodionova

Bauman Moscow State Technical University, Moscow, 105005, Russia

The article studies a new, insufficiently explored aspect of innovations in the field of the Russian and international payment system. Innovative electronic forms of "escorting" the cash flows in the national and global economy have replaced previously used "paper payment orders", request-orders, payments by checks, offsetting of claims, letters of credit, etc. Innovations in the payment system are often implemented faster than legislative rules regulating them are converted. Thus, the Federal Law № 161 "On the national payment system" was adopted only in 2011, and it is constantly improving (article 9), but does not cover dynamic changes. This also concerns the use of such an invention of modern IT-technologies, as virtual currency BitCoin, Litecoin, etc. Currently they attract attention, cause practical interest and increase the range of their use as a tool in the national payment areas of countries and in the international electronic payments. At the same time, the virtual currency is an unusual innovative tool that has both positive and negative potential application. According to the authors, virtual instruments, electronic digital methods "supporting" cross-border financial flows are an objective phenomenon in the age of IT-technologies and their features, effects and legal rules of application are to be investigated by corresponding allied sciences.

Keywords: innovation, virtual currency, legislation, price, digital currency, computer power, exchange rate, payment system, coding, integrating computer users, hash Code, transaction, unit of information, coin, BitCoin (BTC), Litecoin (LTC).

REFERENCES

- [1] Martynov S. RBK daily, 2013, no. 218 (1751), p. 6. URL: http://www.rbcdaily.ru
- [2] *RBK daily*, 2013, no. 219 (1752), p. 6. Available at: URL: http://www.rbcdaily.ru
- [3] Serkhanyants K., Shestopal O., Rozhkov R. *Kommersant*, 2013, no. 102, P (5133), p. 13. Available at: URL: http://www.kommersant.ru
- [4] Virtual'nye birzhi-obmenniki [Virtual exchangers]. Available at: URL: http://www.BTC-e.com, metabank.ru; www.Relay.rutvnet.ru
- [5] *The Economist*, 2013, November, 30, p. 13. (Engl. commentaries by B. Bernanke, head of Federal Reserve System USA).
- [6] Zelenaya O. *Vozmozhnosti i riski ispol'zovaniya bitkoin v Rossii* [Opportunities and risks for BitCoin in Russia]. Available at: URL: http://www.silikonrus.com/2013/09
- [7] Khipponen M. *RBK daily*, 2013, no. 204 (1737), p. 9. Available at: URL: http://www.rbcdaily.ru
- [8] Degtyarev M., et al. *Rossiyskaya gazeta The Russian gazette*, 2013, no. 236 (6212), p. 5. Available at: URL: http://www.rg.ru/2013/10/22/zoloto-site-anons.html
- [9] Strategiya razvitiya IT-tekhnologiy [The strategy of developing IT-technologies], no. 2036-r. Available at: URL: http://www.rg.ru; URL: http://consultant.ru>document/cons_doc_LAW_154161/
- [10] Kazaryan K. RBK daily, 2013, no. 210 (1743), p. 4. Available at: URL: http://www.rbcdaily.ru
- [11] Sammit po razvitiyu informatsionnogo obshchestva WSIS [Summit on the Information Society Development WSIS]. URL: http://www.sb.litera-ml.ru >assets/files/Fulltext/UNESCO_2

Lobachova E.N., Dr. Sci. (Econ), Professor, head of the Engineering Business and Management Faculty at Bauman Moscow State Technical University, is in charge of scientific research at the department in the field of IT-technologies, innovations and education. Author of more than 10 course books in economics for students of engineering faculties, bachelors and specialists; has about 55 publications. Scientific interests include innovations and application of scientific and technological achievements in the Russian economics

Rodionova V.G., Ph.D., Assoc. Professor of the Engineering Business and Management Faculty at Bauman Moscow State Technical University. Laureate of the Russian Federation Government Prize (2002). Co-author of the program (2002) of Economic Education in the Russian Federation (accepted in CIS-countries); co-author of the foundations of the modern state standard in RF on the subject "Economics"; of the textbook "Economics and Business" and textbooks for students of engineering specialties; of the textbook "Microeconomics" for students of economic specialties and areas of Finance Academy under the Government of the Russian Federation. Author of the elective course "Managing in the public sector"; author of the textbook and co-author of the electronic textbook "Macroeconomics". Scientific interests include investigating the problems of micro- and macroeconomics (has more than 26 publications). Co-author of research study "IT-technologies and innovations as the factor of dynamic efficiency in economics" (has 2 publications). e-mail: avroro2@mail.ru