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ANALYSIS OF KNOWLEDGE SOURCES IN STANDARDIZED ENVIRONMENT-RELATED FIELDS USING ORIGINAL SOFTWARE APPLICATION

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Abstract

Within the International Classification of Standards (ICS), the field of Environment, Health Protection and Safety is classified as ICS1 = 13, i.e. ranking 13th among 40 fields at the 1st classification level. The field includes 21 subfields at the second classification level (ICS2). This research aimed to analyze the intensity of innovations in 5 of those second-level subfields (environmental protection, wastes, air quality, water quality and soil quality). The chosen fields cover the broadest and most significant environmental issues. The intensity of innovation is certainly different on local level (Serbia) and global level (the World). Thus, one of the goals of this paper was to collect and compare knowledge sources from local and global databases with reference to financial needs for acquiring those sources. Data was collected by an original software application that was developed for this purpose in Java programming language. The results show that knowledge sources within five analyzed fields vary significantly between local and global level. Continuous development of standards in the whole 13th field was also noted. The number of newly developed standards every year is little more than one per work day. This fact should be enough for the policy-makers to start considering introduction of innovations into legal regulations. Financial resources necessary for obtaining the standards can be predicted based on mathematical relations provided in the paper..

Key words: Java application, ICS, environment, innovation, standard

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