

POSSIBLE TECHNOLOGICAL IMPLEMENTATION OF NSDI IN MACEDONIA BASED ON OPEN SOURCE SOFTWARE

Naumce LAZAREVSKI ¹

ABSTRACT

Software and Hardware are considered as a key point of building a National Spatial Data Structure in Macedonia. Besides the missing true extent and priorities of building the NSDI, as a contribution to effectiveness in upcoming implementation, one possible technical solution will be presented.

One of the budget consuming activities in NSDI implementation is building the central metadata storage, spatial data clearinghouse portal and physical nodes of data stores. Even there are "Of the Shelf" metadata portals and geo portals that comply with the latest OGS and ISO TC 211 standards, one click implementation isn't possible. In the following text implementation of

Other budget consuming activity is extensive education for two levels: Management and technical. In the Management level, both executive managers and standard creators are included. This education is not linked with the SW implementation. On the other hand, technical level includes IT administrators, data storage professionals, geoportal and metadata portal creators and maintenance personnel. This is linked with the technical implementation.

Each implementation of the SDI's is unique to the government condition, local habits and data standards, and most important of the condition, structure and format of the data.

In order to achieve the best possible benchmark grades of the SDI implementation, education of the management and policy makers is required at the beginning. In parallel, several technical solutions should be evaluated in accordance to the world trends, but most important to the local workforce market. This is important for aligning the proposed technical solution with the potential creators and administrators.

In order to reduce the cost of NSDI implementation this paper will propose using Free and Open Source software. The main idea is that proposed platform is not dependent of any software vendor, is open and both adaptable and adjustable to the local situation. Training local peoples to use the software "under the hood" will increase the value of the software and more important the total value and effectiveness of the NSDI itself. In the same time, the government and the nation would not be dependent on foreign expertise and guidance.

Key word: NSDI, GIS portal, Meta Data Portal, FOSS4G, OGC.

¹ MSc. Naumce LAZAREVSKI, n.lazarevski@katastar.gov.mk, naumce.lazarevski@gmail.com

Institution, www.katastar.gov.mk

Tel.: +389 2 3204-843, Gsm.: +389 75 299-330

Str. Trifun Hadzi Janev, 4, 1000 Skopje, Macedonia.