Značenje kartografske informacije za pouzdano upravljanje u kriznim situacijama

Mirjanka LECHTHALER, Department of Geoinformation and Cartography, Research group: Cartography, Vienna University of Technology

Primjenom današnjih tehnologija moguća je organizacija uspješnog donošenja odluka i upravaljanja u kriznim situacijama u smislu pravovremene prevencije, upozorenja, provođenja mjera zaštite stanovništva i okoliša, pružanja brze i učinkovite pomoći i uklanjanja posljedica. To zahtijeva prostorne, privredne i društvene analize, donošenje odluka kao i njihovo provođenje. Uspješno upravljanje u kriznim situacijama izazvanim prirodnim ili antropogenim katastrofama temelji se s jedne strane na otvorenom – on-line pristupu aktuelnim, dobro organiziranim i zadatku relevantnim geoinformacijama. Realizacija toga cilja moguća je uz primjenu interoperabilnih sustava i metoda prikupljanja i arhiviranja geopodataka po zakonom definiranim internacionalnim i nacionalnim standardima infrastrukture prostornih podataka.

Pristup, izmjena i korištenje geoinformacija pri upravljanju katastrofama, s druge strane nezamislivi su bez prostorne komunikacije podržane kartografskom vizualizacijom uključenom u komunikacijske, pozicijske i navigacijske sustave. U svrhu komunikacije i jednoznačne razmjene, zavisno situaciji veoma različitih i neophodnih prostornih podataka putem kartografske informacije uključene u sustave podrške odlučivanja, potrebno je definirati čitak i jasan kartografski dizajn za određena mjerila prikaza (kartografiku, sheme boja, …) te vizualizaciju prilagoditi korisničkim krugovima i novim medijima.

S tim fokusom, koncept sustava za podršku odlučivanju u kriznim situacijama podržan je teorijom i metodama kartografske komunikacije i kartografske vizualizacije, kao i teorijama i metodama prostornog razvoja, planiranja i prostornog upravljanja s ciljem brze reakcije na nadolazeće katastrofe, uz mogućnosti izbora trenutno najboljeg, objektivnog i znanstveno podržanog rješenja za regiju i stanovništvo.

Ključne riječi: geoinformacije, upravljanje kriznim situacijama, sustav za podršku prostornom odlučivanju, kartografske informacije

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Updating of the Base Topographic Database and Official Topographic Maps

Igor VILUS, Ivan LANDEK, State Geodetic Administration, Zagreb, Croatia

After completing production of official topographic maps in the scale of 1:25,000 (TK25) in the Republic of Croatia, a new task was put before the State Geodetic Administration: to maintain and update official topographic datasets

The production of basic topographic sets began in 1996 and ended in 2010. During these fourteen years, all 594 TK25 sheets were produced for the entire country's territory and the Base Topographic Database was developed, containing topologically processed planimetric data created before the above-mentioned maps were created. Since the phase of the basic set production ended, it was necessary to start actions for maintaining and updating maps. Thus in 2009 the State Geodetic Administration lunched the project "Production of Specifications for Updating the Basic Topographic Database and Production of Updated TM25 Sheets", which was completed in 2010.

These updating specifications defined guidelines for maintaining BTD and producing updated TM25 editions in a manner which can satisfy user needs for updated data.

Given the specific situation, the production of topographic data has been outsourced by public tender and contracted with private companies, so we had to develop a system which accurately and precisely defined every step in the production, i.e. data renewal.

Foundations of such a system are well-defined in product specifications for all data created during the production. Therefore, concurrently with developing the Updating Specifications, we also had to adjust other product specifications in order to harmonize primarily the data referring to the digital format of cartographic products.

The other imposing challenge which is one of the basics of efficient updating system is collecting information on changes. Collecting of information on changes presupposes the definition of updating process participants who, based on field reports and their authority, submit changes detected as compared to the official data set according to determined methodology. Based on the information collected on a particular change, the information must be filtered and ranked by priority in order to be submitted to the contractor who has to "map" it on the basis of originals and "integrate" it into the initial data set.

After mapping and producing updated spatial data the changes must be registered in order to systematically monitor development of certain areas.

Thus, the SGA established a mechanism of recording changes in the Book of Changes and the Base Topographic Database was been introduced attribute data which define object lifecycle.

The base dataset updating cycle amounts to 4 years, but also defines shorter deadlines for updating certain data categories. The updating criteria for each specific class of data were been defined in such a way as to list data of specific importance for users under the first criteria group. By using this methodology of the base SGA datasets updating process organization, the important changes of objects will be collected

immediately after their creation and, at the same time, the real cartographic value of the entire dataset will be preserved.

Keywords: updating, SGA, Base Topographic Database, TK25

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