International Journal of Pharmacy and Technology, 2016, vol.8, N4, pages 24407-24414

The possibility of using space and GIS technologies to create a map of the general plan of the city of Volzhsk

Rysaeva I., Sagdeev Z. Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2016, International Journal of Pharmacy and Technology. All rights reserved. The projects of territorial planning, the most important of which is the general plan, are worked out with the aim of forming a long-term strategy for urban development, ensuring sustainable socio-economic, spatial and infrastructural development of the urban environment. Architectural documentation of general planning level is created for significant areas of the territory, which implies the use for this purpose of data of earth remote sensing with subsequent data presentation stage with the help of geographic information systems (GIS). A map of the general plan of the urban district of "The City of Volzhsk" in the Republic of Mari El has been presented in the proposed paper using satellite pictures and GIS Map Info Professional 10.0. The resulting map of the general plan of urban district is formed of 35 thematic layers, reflecting the current functional layout of the territory. In particular, on the map of the general plan there is a mapping of the current and future borders of the urban district, the elements of ecological framework and apartment block, the necessary planning objects, primarily the areas of municipal service, public and residential, public and business, the establishments of health service and social protection, industrial organizations. The main link of any map is the road network of the territory, which, in addition to the already mapped objects, is also presented on the map of the general plan of the urban district "The City of Volzhsk".

Keywords

General plan, Layer, Space picture, Space technologies, Urban district