

Defining and Applying Constraints for 3D Spatial Planning in Urban Areas using Dedicated Software

Ana Cornelia Badea and Gheorghe Badea (Romania)

Key words: Geoinformation/GI; Legislation; Spatial planning; 3D; urban; GIS

SUMMARY

In this paper we want to highlight the advantages of using a dedicated software in the urban planning process. In this regard we chose an Esri solution, and as case study is an area from a city in Romania. The buildings comply with the restrictions related to the type of building set in terms of the number of floors per type of occupancy, but also comply with the basic zoning code, which may be either the current zoning or a proposed future zoning district. Potential buildings provide an image of what can be built based on zoning constraints. The potential buildings represent the basis of calculation of the capacity indicators that allow the quantitative comparison of the design scenarios, together with the empirical values regarding the associated built area for different uses of the space. It is also possible to view the proposed models of buildings in the context of the built environment.

All of applied constraints were defined in correlation with the provisions of the general urbanization plan. The major advantages of this workflow are highlighted.

Defining and Applying Constraints for 3D Spatial Planning in Urban Areas using Dedicated Software (10457)
Ana Cornelia Badea and Gheorghe Badea (Romania)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10–14 May 2020