ABSTRACTS

2. Clara-Beatrice VÂLCEANU, Carmen GRECEA, Sorin HERBAN: Spatial data geoportal for Local Administration – smart solution for a secure and valuable cultural heritage

Implementing a spatial data geoportal at Local Administration level using EU non-refundable funds could be a smart solution for managing secure and valuable property based on IoT meant to reinforce Europe's cultural diversity by making our heritage and our cultural creations available to a wider number of citizens.

One of the strategies developed by the European Commission refers to Digital Single Market and includes tasks such as investing on network and technologies by funding research that enables new technologies like 5G and Internet of Things (IoT). The aim is to benefit European citizens with fast and accessible Internet for the future and make cities more sustainable in view of Europe's 2020 targets. Romania, as a member state, has aligned its priorities to the EU and is constantly trying to develop smart solutions in the interest areas that also permit funds attracting.

Timişoara Municipality has set its goal to become one of Europe's smart cities and communities, thus developing (among others) a cultural strategy for 2014 – 2024. The strategy includes, besides the context of strategy's elaboration, methodology and analysis of the external environment, general objectives, measures and action plan, procedures and indicators for assessing the implementation of the necessary tools, mapping of cultural resources.

Competing and winning the title for "European capital of culture" initiative implied involving the entire community in embarking socio-economic and infrastructure projects supported by an information platform which ensures efficient data management for the municipality. This platform facilitated a good visibility of the candidate city in the context of enhancing the contribution of culture to its long-term development in accordance with its priorities and strategies.

In this context, the authors proposed implementing a spatial data geoportal at Local Administration level (Timişoara City Hall) to streamline the data workflow and provide easy access to it in order to increase the visibility of cultural and historical heritage of the municipality. The need of this geoportal arises from the fact that Timişoara has the widest architectural heritage area in the country, of important value to both Romania and Europe. The dedicated geoportal for the management of heritage objects represents a smart solution which completes the existing urban GIS primarily aiming to contribute to fostering the urban planning and the sustainability of the "European capital of culture" project. This geoportal should include the 3D models of the cultural heritage objects for better preservation over time or restauration purposes and offer virtual tourism tours if they are made available by means of webGIS. The technical basis for this project should be represented by geodetic measurements, laser scanning, IoT and architectural support ensured by an unceasing teamwork of different specialists.

The actuality of the paper arises from using webGIS solution in the "Internet of Things" (IoT) context to merge physical and virtual worlds, creating smart environments that represent the next natural step towards the digitisation of our society and economy.

Organisers

Partners