DOI: 10.20472/IAC.2018.042.047

MAREK WALACIK
University of Warmia and Mazury, Faculty of Geodesy, Geospatial and Civil Engineering, Poland

ARTUR JANOWSKI
University of Warmia and Mazury, Faculty of Geodesy, Geospatial and Civil Engineering, Poland

MALGORZATA RENIGIER-BILOZOR
University of Warmia and Mazury, Faculty of Geodesy, Geospatial and Civil Engineering, Poland

MUNICIPAL UTILITY SYSTEM OF TELEGEOPROCESSING (MUST) CONCEPTION

Abstract:

The aim of the paper is the presentation of the Municipal Utility System of Telegeoprocessing (MUST) conception. The proposed service/system (MUST) is based on European (EGNSS) Galileo and will be used by citizens (C), local government (G) and local business (B). MUST's aim is to provide universal access to real-time technical infrastructure information in the current location with the use of satellite navigation (Galileo), geospatial data and WxS services with use of Augmented Reality and Smart Cities technologies. The proposed service will increase the digital interaction between citizens and local government (G2C) as well as local government and local business (G2B). In addition, the service will be able to provide information about the attractiveness of particular area, thus providing a valuable source of knowledge about the potential users of urbanized space for local government units.

The main technical task is to develop a location-based system (based on Galileo) that will allow real-time identification of users/citizens, real estate (plots), technical infrastructure, and at the same time respond to plans for the deployment of new, EGNSS signal. The innovative and functional result of this project will be the mobile MUST service, which eliminates the biggest barriers to the use of e-government platforms and provides unique information on the cost of connecting to the infrastructure within a planned investment.

Keywords:

technical infrastructure/utility
telegeoprocessing
infrastructure cost determination

JEL Classification: R11, R20, Q01