Integrated Geospatial Information for Sustainable Land Development in Tirana-Durres Area in Albania

Nami Seimiya, Akihiro Sugita, Keiji Yamada, Bhuwneshwar Prasad Sah (Japan) and Lorenc Çala (Albania)

Key words: Capacity building; Cartography; Photogrammetry; Standards; INSPIRE; JICA (Japan International Cooperation Agency)

SUMMARY

Along with start of Albanian democratization in 1991, rural-urban migration resulted into rapid growth of urban population coupled with unplanned urbanization creating severe pressure on infrastructure and environment. In Balkan and Eastern Europe regions, Government of Japan (GOJ) through Japan International Cooperation Agency (JICA) supported number of counties, including Albania, to improve their urban infrastructure and environmental, in accordance with SDGs-2030 goals and European Union (EU) standards, which may help Albania to achieve their ambition to join EU. JICA supported the Government of Albania (GOA) with ODA loan/grant for “Greater Tirana Sewerage System Improvement Project (2008-2014)” and Technical Assistance (TA) for “The Project for Tirana Thematic Urban Planning (2011-2012)” recognized as the substantial contribution in this direction, but continuation of unregulated urbanization created Tirana-Durres urban sprawl.

To address this issue, GOA created the National General Plan for Territory in 2016 with envision of sector-by-sector plans and land management registers preparation for implementing infrastructure development based on the plan. However, required basic large-scale (1/2,000) topographic maps had not been updated since the 1980s. In addition, recently established State Authority for Geospatial Information (ASIG) mandated to conduct geospatial information related services, required to improve the capacity in terms of human resource, equipment and technology. Based on the technical cooperation request from GOA to GOJ, “Project on Geospatial Information for Sustainable Land Development in Tirana-Durres Area” consisting of digital topographic mapping and capacity building of ASIG for utilization, maintenance and updating ability, has been implemented since June 2017 and is planned to be completed by the end of June 2020 by JICA Project Team (JPT) in close collaboration with ASIG.
Project implementation Joint Coordination Committee (JCC), comprising JICA, Embassy of Japan, JPT and ASIG officials, analyzed, defined and adapted all required, but plausible geospatial information specifications to meet the INSPIRE (Infrastructure for Spatial Information in Europe) standards, as well as planar positional 40cm accuracy based on Albanian standard for topographic mapping. Under the supervision of JPT, ASIG staff, with the necessary support from local contractors, have been creating digital topographic maps of 20km2 as a part of capacity building, and remaining 280 km2 by JPT. In addition, to enhance the knowledge and introduce a series of recent technologies, necessary training sessions conducted in both Albania and Japan. GOA and JICA are expecting that ASIG will undertake similar mapping work and services after the completion of the project.