

An aerial photograph of a residential neighborhood, showing houses, green lawns, and trees. A road runs diagonally across the lower half of the image. In the bottom left corner, there is a white geometric overlay consisting of a series of interconnected triangles, resembling a wireframe or a stylized map. The entire image is framed by a yellow border.

# ANNUAL REVIEW 2018

# Slovenia

## Linking Slovenia to Europe through a new coordinate system

**Transforming its national datasets using a new horizontal coordinate system (D96/TM) has enabled Slovenia to link this fundamental spatial information to the rest of Europe.**

The work, completed by the Surveying and Mapping Authority of the Republic of Slovenia, improves accuracy and transparency. By simplifying access to spatial data and its reuse, it also facilitates regional development, preparation and enactment of pan-European policies, environmental protection and the development of new software solutions and applications for the wider public.

Surveying and acquisition of real time location data in the new coordinate system with an accuracy of a few centimeters was achieved by establishing the network of permanent GNSS stations – SIGNAL. This enables surveyed coordinates in Slovenia to be directly linked with surveyed coordinates from other European countries.

The SIGNAL network currently consists of 16 evenly positioned GNSS stations which are no more than 70 km apart. Each contains receivers for continuous surveying all year round and the results are monitored at the control centre in Ljubljana.

The name D96/TM represents the components of the coordinate system: The geodetic datum (1996) and the projection (Transverse Mercator projection). Prior to its use, a spatial data transformation model also had to be established. This included testing the feasibility and usability of the

transformation model for individual spatial datasets, preparing a spatial dataset transformation roadmap and designing software solutions for spatial dataset transformation for other spatial data providers.

D96/TM was enacted by law in 2014 and marks the conclusion of activities which first began in 1994 through participation in an international survey to determine spatial coordinates with the use of new technologies. In 2004, the national strategy of the geodetic reference system was adopted, detailing activities needed to implement the new coordinate system and spatial data transformation from the old into the new, current coordinate system.

