

# Policies and Standards for Building Turkey National GIS Infrastructure

Tahsin Yomralioglu and Arif Cagdas Aydinoglu (Turkey)

**Key words:** e-Governance; Geoinformation/GI; GIM; GSDI; Legislation; Standards;

## SUMMARY

Turkey started e-government actions to build Turkey's National Spatial Data Infrastructure titled as "Turkey National GIS" in 2004. Turkey National GIS actions aim to enable effective use and sharing of geographic data on electronic communication network by developing standards, policies, and technologies. Consecutive actions determined current situation and general vision. However, technical deficiencies result in time and effort losses on production, management, and sharing of geographic data. General Directorate of GIS was established in 2011. Projects were triggered to define geo-data standards and to build legal and administrative structure of National GIS. Hereby, national GIS strategy and the legislation framework were determined to manage geographic information nationally. General administrative structure was designed for National GIS committee and working groups. National GIS portal with metadata is being built to share geographic information. To develop geo-data standards, data requirement analysis was utilized to all stakeholders of National GIS, including 15 of ministries, 88 of general directorates, and 118 of departments. Reference geo-data themes were determined as geodesy, topography, ortophoto, land cover, hydrography, transportation, administrative unit, land registry-cadastral, building, and address. As a result of analyzing existing geo-data, data requirement works, and international standards; Data specifications were designed for these reference geo-data themes. These standards are being tested to use in GIS projects corporately. In this study, experience and expectations were examined to define standards and policies for building Turkey National GIS infrastructure.