

Implementation of National Spatial Data Infrastructure (NSDI) In Bahrain

*Author: Dr. Khalid A. Rahman Al-Haidan- Director of GIS Directorate
Central Informatics Organization (CIO)*



Abstract

The GIS Directorate of the Central Informatics Organization - CIO, Kingdom of Bahrain, in concordance of a Government Decree and directives of National GIS Steering Committee (NGISSC) officially implemented National Spatial Data Infrastructure (NSDI) for the Kingdom of Bahrain, in February 2005. Bahrain Spatial Data Infrastructure (BSDI) Portal is a manifestation of NSDI meant to fulfill the mandates of NGISSC and thereby NSDI. Bahrain Spatial Data Infrastructure (BSDI) Portal-that operates on a GIS database of geospatial data layers such as Street Centerlines, Addresses, Electricity & Water Transmission and Distribution, Telecommunications Infrastructure, Gas & Oil Pipelines, Sewerage & Drainage, and others, serves Government Organizations, Private Sectors and Academic Institutions of the Kingdom of Bahrain. Bahrain Spatial Data Infrastructure (BSDI) build with an infrastructure conforming to the stipulations of ISO, OGC, Inc. functions as a powerful tool for economic and social development, and environmental management, enabling the full potential of GIS technology. BSDI facilitates and co-coordinates the exchange and sharing of spatial data among the stakeholders in Government, Business Sectors and with Citizens (G2G; G2B and G2C), resulting in substantial reduction in the cost of development and arresting duplication of data. One of the objects of this project is to emphasize the concept of a single, consistent and accessible, government funded infrastructure as a basis for developing competitive and value adding services towards sustainable development. This endeavor reflects and promotes recommendation of the use of the corporate database concept to integrate GIS data for all units of local

government participating in a cooperative Corporate GIS program, under the auspices of NSDI. As a future endeavor BSDI aims towards enabling the Kingdom of Bahrain to participate constructively in regional and global initiatives of spatial data infrastructures and thereby, assist countries in the region, in developing their economies.

Authors Biography:

Dr. Khalid A. Rahman Al-Haidan - Director of GIS Directorate of the Central Informatics Organization (CIO), Kingdom of Bahrain, in additions to other prestigious official mandates, is the designated Member and General Secretary of National GIS Steering Committee (NGISSC) of the Kingdom and, in his official capacity has initiated the implementation of National Spatial Data Infrastructure (NSDI) initiatives. Dr. Al-Haidan – holding a Doctorate Degree in National Spatial Data Infrastructures is credited with pioneering and taking progressive steps towards the Government's vision of establishing a robust geospatial infrastructure towards sustainable development of public and private sectors by the culmination of strategically oriented plans; innovative GeoInt applications devoted to geospatially fortifying government organizations. Throughout his tenure Dr. Al-Haidan has worked with a portfolio of strategy, innovation, and research projects that facilitate the delivery mechanism of effective geospatial solutions to bolster efforts towards the Kingdoms development.

Author's Contact:

Dr. Khalid A. Rahman Al-Haidan; Director GIS Directorate (CIO)
Central Informatics Organization (CIO);
P.O. Box 33305, Isa Town, Kingdom of Bahrain
Email Address: alhaidanka@cio.gov.bh
Telephone: (+973) 17878187
Mobile Phone: (+973) 39466696
Facsimile: (+973) 17878190
Web Site: www.cio.gov.bh

