

# 3D-enabled Spatial Data Model for Bahrain

The Kingdom of Bahrain has moved a step closer to developing a new 3D-enabled spatial data model of the nation following a new partnership between Ordnance Survey International and the Survey and Land Registration Bureau (SLRB).

The SLRB is the government organisation responsible for land, aerial and hydrographic survey services and the registration of real estate properties in the Kingdom of Bahrain. As part of the recently signed agreement, the SLRB will call upon the expertise of Ordnance Survey International to design and build a new 3D-enabled national spatial data model.

In preparation for the 'National 3D Mapping of Bahrain' programme, SLRB needs to move its current geospatial database to an object based data model to support full geometric representations in 3D. An Invitation to Tender was issued by SLRB in July 2012, inviting organisations to submit proposals for the creation of a new 3D-enabled sustainable spatial data model. Ordnance Survey International responded to this competitive tender and is delighted to have been selected as the successful supplier to build the new data model for the Kingdom of Bahrain.

Spatial data models describe the way in which data is structured and stored within a database, as well as making data available in a well-defined way. The new model will produce intelligent data enabling effective analysis, decision-making and greater consistency in the way SLRB maintains data and distributes it to stakeholders.

The model will be built on industry standards from the Open Geospatial Consortium (OGC) and the International Organization for Standardization (ISO). Use of open standards will provide SLRB and its stakeholders with a consistent, standardised and shared view of location information enabling:

- cross-organisation collaboration and decision making;
- development of location-based national and regional policies; and
- establishment of new services utilising spatial data.

The new contract between SLRB and Ordnance Survey International capitalises on over 35 years of experience and expertise in data modelling. With a worldwide reputation for being one of the leading providers of geospatial information, Ordnance Survey the national mapping authority for Great Britain, serves on a variety of worldwide committees including the Open Geospatial Consortium.

SLRB and Ordnance Survey International recognise the value of a partnership approach to delivering this project with both parties committed to sharing knowledge and understanding through collaborative engagement.

Ordnance Survey International is a business division within Ordnance Survey that works closely with UK Trade & Investment (UKTI) in the Gulf Cooperation Council countries: offering government to government advisory services that underpin the development of authoritative national mapping and help deliver national economic growth. The new agreement builds on the UK Government agenda to build stronger relationships with the region, sharing expertise, knowledge and skills.