

a. A brief statement of our organization's activities in photogrammetry, remote sensing and geographic information systems.

INTRODUCTION

Bayanat's (formerly GHQ-Military Survey Division) in-house capabilities include over 40 years of Geospatial Services, topographic survey and cartographic map production with over 20 years of experience of nautical and aeronautical surveying for the whole United Arab Emirates.

Bayanat's strategic direction extends beyond conventional surveying by focusing on developing national frameworks and infrastructures for geospatial data, coordinating and supporting related initiatives and activities, and sharing and transferring relevant knowledge. Bayanat's homeland security support covers geospatial data for national, border protection, and crisis management, in addition to applications and simulation models for weapons testing and assets and logistics mapping.

Bayanat contributes to the national and regional economies through:

- Coordinating geospatial data activities in the country and beyond the UAE's borders;
- Providing UAE-wide fundamental spatial data to form the infrastructure cornerstone of decisionsupport applications;
- Creating education and awareness programs for utilizing geospatial data;
- Providing high quality digital base maps and spatial data covering the UAE;
- Supporting national standards for spatial coordinate reference systems and data.

Bayanat provides end-to-end, customized geospatial data products and services such as land surveys, aerial and satellite imagery, map production, nautical charts, and geographic information system (GIS) analysis that covers the UAE.

Our vision is to be the National Leader in mapping, surveying and innovative geospatial services and solutions, in order to allow the community to explore the possibilities, within and beyond the UAE.

PHOTGRAMMETRY

Equipped with our own aircraft, Intergraph DMC 230 III aerial digital camera, CZMIL NOVA bathy topo lidar topographic LIDAR and INPHO's photogrammetric system, our wide range of products and services covers:

- Data acquisition;
 - Digital Aerial Photography & Lidar Survey
 - Drone Survey
 - Mobile Mapping System (MMS) (1cm point spacing)
- Data processing (Satellite Imagery, Aerial Imagery & LiDAR);
- · Features extraction and compilation;
- Measurement (mensuration) and aerial / satellite triangulation;
- Seamless Aerial/Satellite Ortho Mosaics;
- Digital Terrain Model (DTM);
- Digital Surface Model (DSM);





- Contour Lines Generation;
- 3D Vector data compilation;
- 3D models;
- 3D data management and data transformation;
- 3D Customized Solutions.

REMOTE SENSING

Technology Partnerships

- Maxar;
- Planet Labs Inc;
- United Arab Emirates Space Agency: Space agency of the UAE, responsible for developing, fostering and regulating a sustainable and world-class space sector in the UAE.

The provision of Very High resolution satellite images is a strategic activity of Bayanat, both as a complementary service to Aerial photography and as a necessary tool for actionable GeoINT and IMINT.

Along with Bayanat's in-house expertise in image processing, 3D terrain modeling, ortho-rectification, feature extraction and GIS, Bayanat has processed satellite image data for clients belonging to a variety of industries for their domestic and international mapping, GIS, environmental and design project needs.

Bayanat shares an unmatched commitment to quality control. We provide continuing geodesy, mapping, 2D and 3D visualization support services to our clients. On every GIS project, we implement ongoing data quality control to ensure that coordinate databases, foreign source data, such as geological and topographic maps, GIS data attributes, and layers create a truly seamless GIS mapping environment. By combining unique field operational knowledge from our functional team members, with understanding from the technology team, Bayanat is able to conceptualize, develop, and deliver insightful, bespoke solutions to end users.

High-level portfolio related to Raster Data and Remote Sensing capabilities

- VHR aerial / satellite raster imagery: 0.3m to 0.8m;
- Medium Resolution raster 1m to 5m;
- SAR Imagery;
- Satellite Basemap 0.4m;
- Cloud based imagery dissemination platforms;
- Digital Imagery Products (RGB &SWIR);
- Image Processing (Change Detection, Feature Extraction, Classification);
- Digital Data Models (DTM, DSM 3D city models).

GEOGRAPHIC INFORMATION SYSTEMS

Technical Partnerships

- ESRI: The global market leader in GIS;
- Open Geospatial Consortium (OGC): a worldwide community committed to improving access to geospatial (location) information;





ISO: A global network of national standards bodies.

Geodatabase Design & Management Services

Bayanat enables its customers with a wide range of geospatial data capabilities including:

- GeoDatabase Modeling Services
 - Address Geo-Data Model;
 - o Multi Scale (Small , Large , Medium) Basemap Geo-Data Model;
 - Transportation Geo-Data Model;
 - o Administrative Geo-Data Model;
 - Hydro Geo-Data Model;
 - o Defense Geo-Data Model;
 - o Census Geo-Data Model:
 - Local Government Geo-Data Model;
 - o Homeland Security Geo-Data Model;
 - o Municipal Geo-Data Model;
 - Cadastral Geo-Data Model;
 - Genomes & Gazetteers Geo-Data Model.
- Geodatabase management and administration services at industry standard RDBMS level (Oracle, SqlServer), Workgroup-level (SQL Express, Oracle Express) and file-based level.
- Enterprise GIS Implementation Services (EGIS)
 - Developing an organization-wide GIS approach using standards and consistent methodologies that address the needs of all units of the organization.
 - Migrating existing GIS applications and data to current GIS technology capable of supporting all potential users in a cohesive manner.
 - Integrating GIS data and services with other information systems within the organization as part of an overall enterprise information systems solution.
 - Adapting the GIS staffing structure to support the enterprise approach.
 - Training the IT and GIS staff to design, develop, and maintain the enterprise GIS Resources
 - Enterprise Application Development

Bayanat's Application Development providing GIS solution in multi-environment using ESRI API's and other third-party tools such as follows:

- Desktop Solution
 - ArcObjects
 - Actual Map
- Web Solution
 - ArcGIS Silverlight API
 - .NET Web ADF, ASPMAP
- Mobile Solution
 - ArcGIS API for IOS





GIS System Architecture and Design Implementation

Bayanat provides the following services:

- Consultancy Services on Network, Hardware and Software Procurements.
- o Infrastructure Planning and Implementation
- System Deployments
- Storage and Disaster Recovery Management.
- o 24x7 IT System Support

Spatial Data Management Services

- Geospatial data sets:
 - Boundaries
 - Designated areas
 - Buildings
 - Geodetic points
 - Transportation
 - Hydrographic features
 - Utilities
 - Elevation
 - Vegetation
- o Spatial database schema
- Data dictionary and product catalogue
- Spatial database modeling
- o Spatial database management
- Spatial data analysis
- o GIS web/mobile application development and customization
- o Dashboards
- Interactive maps
- o Interoperability models
- Geo-processing models

b. A list of organization officers and addresses.

Mr. Faisal Albannai - Chairman of The Board of Directors:

Bayanat for Mapping and Surveying Services LLC.

P.O. Box: 43221

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