Challenge
The Geomatic Department's existing storage infrastructure was reaching maximum capacity and needed upgrading to accommodate the growing high-resolution photographic archive and ensure safekeeping of valuable cadastral information.

Solution
An open, flexible storage solution based on Western Digital Ultrastar® Data60 hybrid storage platform and QSAN XCubeSAN Unified Storage Controller.

Key Results
The combined solution makes it easy for the Geomatic Department to meet capacity and performance needs without busting the budget. This joint solution delivers great performance, is easy to scale on demand and provides higher storage reliability thanks to Western Digital's innovative technologies.

Organization Profile
The General Directorate of Land Registry and Cadastre, also known as the Geomatic Department, is tasked with keeping the cadastral (ownership and land registry) records for the Republic of Turkey. To this end, the Geomatic Department developed the TAKBIS project to maintain, update and electronically deliver this valuable information to local governments, public institutions and research organizations throughout the country.

Safeguarding Valuable Data
The data stored within TAKBIS includes maps and photographs of roads, canals and pipelines of gas and water throughout the country. This data is considered to be of the highest value as it would be extremely expensive to regenerate. It was originally created at great expense and effort using aircraft, drones and mobile camera cars. With so much time and effort invested in collecting this information, safekeeping the digital content created is crucial. That is why it was extremely important for the Geomatic Department to find a top-notch storage solution to cope with their growing photographic archive. The department needed a flexible, reliable and easy-to-scale storage infrastructure to maintain high-resolution images and ensure they could deliver that information rapidly when needed.

Western Digital, QSAN and DepoTurk were the Perfect Solution
To address these challenges and save precious time, the Geomatic Department turned to its trusted technology partner, DepoTurk, for assistance. DepoTurk is the leading IT System Integrator and solution provider of innovative network and communication solutions to business and government customers in the Republic of Turkey. The experts at DepoTurk designed a powerful storage architecture based on the QSAN XCubeSAN Unified Storage Controller and the Western Digital Ultrastar Data60 hybrid storage platform.

QSAN Technology, a leading storage technology designer and manufacturer, strives to build enterprise-class storage systems that provide outstanding performance, secure data protection and comprehensive data management. The QSAN XCubeSAN provides a high-quality data storage system that is simple, secure, scalable and reliable. In addition, QSAN brings a multitude of enterprise features to make storage applications more efficient, including SSD read-write cache (QCache), auto-tiering (QTering), snapshot (QSnap), local volume clone (QClone) and features to improve data acceleration and protection.
Western Digital Better Together

To improve the reliability and efficiency of this critical storage infrastructure, DepoTurk selected the Ultrastar Data60 hybrid storage platform filled with Ultrastar HelioSeal® hard drives. The Ultrastar Data60 includes unique technologies not found in any other storage platform: patented IsoVibe™ and innovative ArcticFlow™. IsoVibe reduces vibration-induced performance degradation, while ArcticFlow overcomes the cooling issues by introducing cool air into the middle of the platform. Combining these technologies with HelioSeal hard drives provides a solution designed for long-term reliability and reduced drive failures, enabling the safekeeping of all the digital content stored on the platform.

Immediate Results

The combined solution of QSAN XCubeSAN with Ultrastar Data60 provided the Geomatic Department with the ability to store the petabytes of captured images and metadata required for the TAKBIS project in a low maintenance solution that provides high performance and is durable, reliable and easy to use. The Geomatic Department is very happy with the innovative solution DepoTurk delivered and within the first month they were able to scan, transcribe and store 25,564,912 title deed records in Ottoman script into the new digital environment.

For more information on how QSAN and Western Digital work together to enhance your data storage infrastructure and improve your business operations, visit westerndigital.com/platforms.