

When it comes to transporting invaluable samples for high-stakes scientific research, every detail matters. Recently, World Courier was entrusted with this vital task by the Scientific and Technological Research Council of Türkiye (TÜBİTAK). The mission was a resounding success and marked a significant milestone in facilitating global scientific advancements and space exploration.

The situation

TÜBİTAK embarked on an ambitious project — conducting 13 different experiments aboard the International Space Station (ISS).

This endeavor required the safe transportation of various temperature-controlled components, including blood samples, seeds, and other scientific research objects from multiple universities across Türkiye to the U.S. Given their irreplaceable nature and strict timelines, ensuring these valuable materials arrived safely was paramount. Recognizing World Courier's expansive network across Türkiye as well as globally, TÜBİTAK approached us for our expertise in building custom logistics plans.



The solution

Invaluable samples maintained at refrigerated and deep-frozen temperatures from Türkiye to Miami and back again from Houston to Istanbul.



We adopted a meticulous approach to develop a bespoke logistics plan tailored to meet their needs. By taking a consultative approach to planning, we worked with the team to fully establish needs of the project while remaining cost effective and limiting risk of damage to samples. Our extensive global coverage offered them assurance that no location was out of reach for us — something other providers could not guarantee.

We ensured that these invaluable samples — including those of blood — were maintained at refrigerated and deep-frozen temperatures throughout their journey from Türkiye to Miami — and back again from Houston to Istanbul after their space-based tenure on the ISS. These samples were invaluable; replacing them would be nigh on impossible without considerable effort and expense. Hence there was an immense need to ensure their safe return from the U.S. to Türkiye.

Our client-centric solution incorporates real-time location monitoring (RTLM) on our global thermal containers (GTC). This provides continuous visibility during the transit of refrigerated shipments — enabling clients to access highly accurate, real-time location data of their goods through the Customer Portal.

The global thermal container passive shippers are a versatile multi-use system. These have been meticulously designed to maintain consistent standards across all consignments and ensure these precious samples destined for space were kept at the right temperature. They can be configured for every temperature range and nearly every size — making them an adaptable solution for varied shipping needs.

Despite unavoidable delays due to weather conditions affecting the return trip of the shuttle carrying these precious items back from space, our team remained on standby to ensure no time was wasted once it was safe for transportation. We also facilitated immediate inspection by involved scientists at our World Courier facility immediately following customs clearance in Istanbul.





The outcome

Despite some challenges along this intercontinental journey and onwards into space and back again, World Courier successfully delivered all shipments without delay or damage — contributing significantly towards furthering research within Türkiye's national space program. By aiding in such pivotal missions concerning Türkiye's ongoing progress within space exploration, we have set new standards not only in logistical planning but also in enabling groundbreaking scientific advancements.

Key facts for transporting blood samples:

- **01 Packaging** We ensure blood samples are securely packed in our qualified and high-performance solution: the global thermal container
- **O2 Temperature control** Requiring highly-specific temperatures, we ensure specimens and samples stay within the correct range
- **03 Transport regulations** We comply with all local and international regulations for transporting biological specimens. This compliance is crucial for safety and legal reasons
- **04 Quality control** Audits and checks are regularly conducted to ensure compliance with all procedures and regulations

When contributing towards groundbreaking scientific advancements or when delivering critical medicines — trust World Courier's expertise in managing complex logistical operations seamlessly while always keeping you informed every step of your shipment's journey.

50+

countries with dedicated teams on the ground

4,000+

team members

120+

company-owned facilities globally



World Courier is a leading global distribution logistics company offering innovative, customized, and scalable product transport and distribution services.

With temperature-control packaging, monitoring technology, and over 50 years of experience, our highly experienced team can help you navigate the logistic complexities of your next project.

Contact us today about your specialty logistics requirements.