

Background

Imagine a world where every shipment across the air cargo industry is fully visible, seamlessly connected through real-time updates, and entirely free from outdated systems or paper trails. That world is within grasp, but achieving it depends on the unified adoption of ONE Record as the preferred IATA standard for data sharing.

Today, the industry faces a defining moment. Legacy standards like Cargo-IMP and Cargo-XML, respectively adopted as IATA standard in 1975 and 2010, no longer meet the demands of a digital, fast-paced global supply chain. Air cargo stakeholders expect transparency, real-time updates, and reliability, but outdated systems slow us down, create inefficiencies, and limit innovation. Modernization and digitalization are no longer optional but essential.

Data sharing standard

ONE Record offers a transformative solution—an API-based standard designed to enable seamless, transparent, and real-time data sharing across all stakeholders

The technical standard is composed of a

- Common data model for air cargo that facilitates data integration with existing and new data services
- API specification that details how airlines and their partners can easily connect their systems with each other
- Security specification that ensures data privacy and confidentiality for all parties

These specifications are available at https://iata-cargo.github.io/ONE-Record/stable/

Industry benefits

The objective of ONE Record is to address the main challenges of e-freight and unlock the possibilities of a full digital air cargo industry and create opportunities for new value-added services and business models. This includes:

 Enhanced data sharing and collaboration: ONE Record enables transparent and secure data sharing between stakeholders in the air cargo supply chain, such as airlines, freight forwarders, ground handlers and customs. This leads to greater efficiency and streamlines operations.

- Real-time data access: ONE Record provides real-time access to shipment data, allowing stakeholders to make informed decisions and respond quickly to changing circumstances, such as delays or disruptions.
- Improved data accuracy and consistency: By utilizing a standardized air cargo data model, ONE
 Record ensures that all parties have access to accurate, consistent, and up-to-date information.
 This reduces errors and discrepancies, leading to more efficient operations and better customer
 service.
- 4. **Increased transparency and traceability:** ONE Record offers greater visibility into the entire supply chain, allowing stakeholders to track shipments and monitor their progress at every stage. This transparency helps identify bottlenecks and inefficiencies, leading to improved performance and customer satisfaction.
- 5. **Reduced paperwork and manual processes:** Supporting the original objectives of the e-freight program, ONE Record continues to eliminate paper by digitizing and standardizing data exchange.
- 6. **Future of digital cargo:** ONE Record creates the foundation for true digital air cargo where airlines, their partners and service providers can develop collaborative and automated digital services and welcome a new generation of digital savvy air cargo innovators.

Implementation deadline: 1 January 2026

Resulting from an industry wide effort including (but not limited to) forwarders, airlines, ground handling agents, IT Solution Providers, the IATA Cargo Services Conference has endorsed ONE Record as the preferred standard for data sharing among air cargo stakeholders as of 1 of January 2026.

To this end, more than 200 companies around the world are involved in pilot projects to test and implement ONE Record use cases, including, for example, exchange of air waybill data, freight tracking, customs processes and multimodal transport integration. Many of these pilots are now converting these capabilities into operational systems.

https://www.iata.org/one-record