



## Automated Transportation Logistics and Analysis System (ATLAS)

ATLAS is an integrated web-based logistics management system allowing users to manage inbound and outbound freight shipments by highway, rail, and air. ATLAS is based on the core competencies of Automated Transportation Management System (ATMS) and provides an integrated framework for data sharing between Carriers and Shippers.

ATMS became operational in the early 1990s, and underwent a series of major improvements over its lifecycle. An assessment was deemed necessary by DOE to establish current cost reasonableness by reviewing benefits, user satisfaction and assess the long-term management approach (including expansion of site applications) for ATMS, and the viability of alternative logistics management systems. This resulted in the integration of ATMS functionality into ATLAS.

Originally, the ATMS program was established in response to a 1989 DOE Inspector General's report outlining significant opportunities for cost savings and operational efficiency through electronic commerce. Today's system allows users to electronically prepare shipments, determine best rates and routes, prepare shipping documents, and audit transportation bills before they are paid. It helps users review carrier performance and use collected data to analyze opportunities for system-wide and site-specific logistics improvements.



Each year, the DOE spends millions of dollars transporting Hazardous and Radioactive materials and waste which requires an integrated approach to management and data analysis. Office of Packaging and Transportation's approach of modernizing its transportation business systems environment consists of an overall effort to better synchronize, integrate, and coordinate operations to ensure alignment in support of the transportation activities in the field (i.e., across the enterprise). Providing an enterprise solution for DOE-wide use is a component of DOE's IT Governance initiative.

As part of this initiative, DOE's ATMS was enhanced and moved from a physical legacy hardware platform to a virtualized implementation in the DOE EM Cloud. The DOE EM Cloud is a private cloud providing a platform for authenticated users to access DOE Enterprise business systems.

ATLAS is a modular system that integrates the activities performed by DOE and its contractors in packaging and transportation of materials including radioactive and other hazardous materials. Its modules standardize and simplify common shipment information such as bills of lading, freight bills, rate structures, and hazardous materials documentation. Through consistent implementation, it ensures compliance of shipments with applicable federal, state, and local regulatory requirements. The modules include:



## **Carrier Profile Module**



The carrier profile module provides centralized, current, carrier information. Carriers have access to update their information as changes occur, allowing for more accurate, up-to-date information for shippers, and reporting. Carriers have the ability to update their registration and insurance documents and expiration dates, keeping data current, for shippers to accurately choose carriers for DOE shipments.

## **Shipping Documents Module**

This module allows the user to completely prepare the required documents for commodities to be shipped, and to show other supply and transportation information tailored to an individual sites' needs. The documents produced through this module include the following;



### Bill of Lading (BOL)

The BOL is the legal document between the shipper of a particular good and the carrier, detailing the type, quantity and destination of the good being carried. The BOL also serves as a receipt of shipment when the good is delivered to the predetermined destination, and it is an evidence of title to the relative goods, if "negotiable". The BOL also includes information specific to the type of shipment - general (non-hazardous), hazardous, and radioactive material.

### Uniform Hazardous Waste Manifest (UHWM)

This is an EPA (U.S. Environmental Protection Agency) required form providing a complete paper trail of a waste's progress from a generator through treatment, storage, and disposal. It identifies the type and quantity of the hazardous waste being shipped, and contains a generator's certification of waste minimization practices.

### International Air Transport Association (IATA)

This document is the shipper's declaration for dangerous goods (document for air transport). It can be prepared for both radioactive and non-radioactive materials, and ensures the shipper fully complies with all the domestic and international requirements for transporting dangerous goods by air.

## **Rate/Route Module**



This module assists the user in carrier selection based on the type of material being transported and the transport method (air, parcel, truckload, and less than truckload). The user can perform shipment cost analysis based on material type, transport method, and carrier criteria. It also allows comparison of the total cost (including freight cost) of purchasing a product from different vendors across the United States. After the carrier is identified, it is assigned to the various shipping documents.

## **Freight Bill Module**

This module allows heterogeneous systems to share information. It provides a way of sending commercial documents such as purchase orders and invoices electronically, thus eliminating paper documents and human interfaces. A custom EDI solution was developed for transferring billing data and shipping status information from carriers directly into ATLAS. The EDI solution downloads site(s) carrier invoices nightly in support of their freight bill payment systems. This system performs a pre-payment audit of invoices to assure invoices are consistent with freight bills.



## **Reporting**

Carrier Activity	Total number of shipments, weights, and costs for each carrier, noting shipments as paid or not paid.
Carrier Expiration	Listing of all Carrier expirations by mode and/or total and shows any registrations, permits or certifications which are expired or expiring within a date range for all documents tracked by ATLAS.
Traffic Activity	Total number of packages including weight, amount paid, audit savings, and discount savings for each type of carrier mode (air, truckload, less-than-truckload).
Site Transaction	Listing of transactions with a capability to search by date or range of dates, listing by carrier, and sorting by type (non-radioactive, hazardous, and radioactive).
Shipment/Package by Mode	Total number of shipments, number of packages, weight, cost, and discounts for each carrier and mode for both inbound and outbound shipments.

---

**Additional ATLAS information may be obtained from:**

**Office of Packaging and Transportation  
Office of Environmental Management  
U.S. Department of Energy  
1000 Independence Avenue, SW  
Washington, DC 20585**

<https://atlas.doe.gov>

**Questions: askpat@hq.doe.gov**