



Automated Transportation Management System (ATMS)

System Features

- Web Application
- Carrier Evaluation and Selection
- Automated Shipping Papers
- Hazardous Waste Manifest
- Electronic Data Management
- Online DOT Regulations

The Department of Energy's (DOE's) Automated Transportation Management System (ATMS) is an integrated web-based logistics management system allowing users to manage inbound and outbound freight shipments by highway, rail, and air. Its early development was prompted by 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, prepare shipping documents, and audit transportation bills before they are paid. It helps users evaluate carrier performance, track shipments, and use collected data to analyze opportunities for system-wide and site-specific logistics improvements. An important feature of ATMS is its capability to safely manage radioactive and other hazardous materials shipments in a complex regulatory environment.

System Modules

ATMS is a modular system integrating 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 insures full compliance of the shipments with applicable federal, state, and local regulatory requirements. The modules include:

Logistics: Allows the user to enter freight bill information through a multi-functional input screen. This information is critical for such functions as performing pre-payment audits, approval of freight bills for payment (or flagging them for correction), and creating the electronic file for accounts payable systems. It captures DOE complex-wide shipment information including hazardous materials, cost, savings, and other information needed for reporting.

Rate/Route: 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 do shipping cost analysis based on material type, transport method, and carrier criteria. It also allows comparison of total cost (including freight cost) of purchasing a product from different vendors across the United States.

Shipping Documents: Allows the user to prepare all required documents for the commodities shipped, and show other supply and transportation information tailored to site needs. The documents produced through this module include:

IATA: This International Air Transport Association document is the shipper's declaration for dangerous goods document for air transport. It can be prepared for both radioactive and non-radioactive materials.

Bill of Lading (BOL): The BOL is the legal document between the shipper and the carrier, detailing the type, quantity, and cargo destination.

It is also the shipment receipt when goods are delivered to their destination, and it is evidence of their title. The BOL includes details on the various types of shipments - 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.

EDI (Electronic Data Interchange): Allows modern electronic business and logistics management systems to directly share information. This module is the two-way information highway for documents such as purchase orders, invoices, and shipment status, eliminating paper documents and human interfaces. Carrier invoices are downloaded nightly for a prepayment audit against freight bills. This audit is a source of significant cost savings and error reduction.

TAMS Reporting: The TAMS (Transportation Archives Management System) module enables ATMS users to produce a variety of standard and tailored reports. Report data is retrieved from ATMS once shipment data has been recorded and sent to TAMS in the nightly batch process. There are four different types of standard reports. They can be produced for a single site or multiple sites. Unless the user checks the "Use Receive Date" button, the report will be created based on the date shipped. Standard reports include:

Carrier Activity Summary: Total number of shipments, weights, and costs for each carrier, noting shipments as paid or not paid.

Traffic Activity Summary: 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 Summary: 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 Summary by Mode: Total number of shipments, number of packages, weight, cost, and discounts for each carrier and mode for both inbound and outbound shipments.



Recent ATMS Evaluation

A comprehensive ATMS review was conducted in early 2007 by Florida International University. The reviewers found ATMS to be a clearly successful system serving 32 DOE shipping sites with automated tools to manage freight operations at the lowest possible cost.

Additional ATMS 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**

**<http://www.em.doe.gov/pages/transportation.aspx>
Questions – askpat@hq.doe.gov**