

Department of Energy Transportation Management Council

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The Transportation Management Council concept was adopted by the Department of Energy (DOE) following a benchmark study of private industry by the Transportation Operations Organization at Lockheed Martin Energy Systems, Inc. This concept is widely accepted in the larger, geographically diverse companies in terms of business strategy in the transportation arena; its implementation can greatly enhance the management and pricing strategies of smaller organizations within the scope of council management.

Primary reasons for utilizing packaging and transportation council management include protecting and lowering overall packaging and transportation costs and ensuring that volume discounts offer the most effective and efficient means for purchasing our transportation services. Additionally, there are decreased financial resources in all of the industry and certainly in the DOE environment. This requires more efficient and effective management techniques and services procurement due in part to human resources reductions within present budget constraints.

One area that has been ambiguous in the DOE environment is the establishment of meaningful performance metrics. Many companies establish performance metrics for transportation operations based on a unit per cost, and a common metric used in our industry is the cost per ton mile. The DOE environment has traditionally used a per hundred weight measurement; however, this has not necessarily been a good performance metric when compared across the DOE complex among various modes of transportation. Therefore, one of the primary functions of the Council was to establish some standardized performance metrics which could provide meaningful comparison of performance among the various DOE entities.

A successful Transportation Council requires management support at the highest levels of both DOE and the contractor, including active participation on the part of the individual packaging and transportation managers and specific subject matter experts who may be included in the process. The Council also requires a commitment from all managers to act together for the benefit of the Council. A second DOE Management Council has been established to focus specifically on packaging management given the realization that packaging procurement, development, and management is an area of considerable expense for DOE, and there is an opportunity for DOE to realize some economies of scale through centralization and standardization of the packaging procurement process.

In order to establish a successful Council and to understand what the cost drivers are, total transportation costs must be identified, and these total costs can be divided into the following five basic areas:

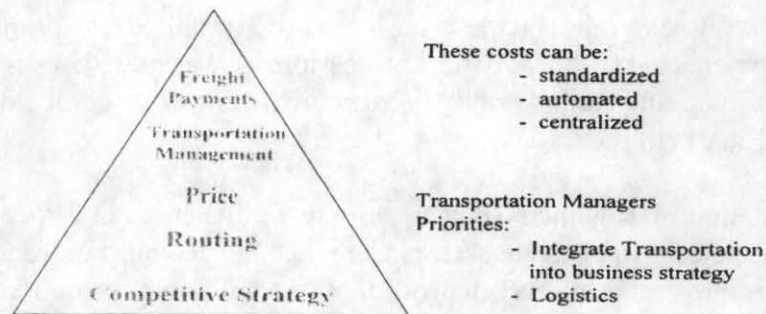
1. Competitive strategy, i.e., placing the DOE and the contractor in a position that they manage their transportation in an efficient, effective, and compliant manner. A tremendous amount of importance is placed on the safety aspects of transportation. The Interstate Commerce Commission (ICC) is facing sunset with the past functions of the ICC still required being transferred to the Department of Transportation. The industry is continually placing more emphasis on safety and economics which in turn places equally important emphasis on an efficiently and effectively managed transportation management process.
2. Routing or the selection of the carrier. This can be a simple telephone call for a spot bid at the time of shipment or as complicated as a negotiation with a group of carriers to produce a contract or, in the DOE arena, promulgation of a 10721 tender agreement.
3. Price or the rate. In the old environment, rate bases seemed clearer. Tariffs, essentially rate lists or price lists, were defined, similarly structured, and had rules or requirements, and although sometimes tedious, were generally understood as a finite set of working/pricing rules. In today's environment, the cost of transportation has no boundaries and there are a multitude of pricing methods for most shipments. As transportation professionals, we must be cognizant of these various pricing and rating strategies, or we will fail to be competitive in the industrial marketplace.
4. Transportation management (human resources). There is a tremendous effort at all DOE sites and in the private sectors to reduce headcount, i.e., reduce the number of people performing a level of work that has traditionally been accepted in the past. Transportation management under the prior heavily regulated structure has been an extremely labor intensive operation. The tariffs were complicated and so detailed that the technology available in this time period was not readily applied

for use in the transportation workplace. It was cost prohibitive for computers to provide detailed tariff information; however, automation is now a key to effective transportation management. There is an industry trend to simplify the overall pricing concept (as identified in total transportation costs, Item 3) and with this simplification comes the ability to automate the process. This, in turn, provides the opportunity to reduce present labor intensive costs.

5. Freight payment. Freight payment is another process that can now be easily automated with a potential for fantastic savings in transportation costs. Previously, the carriers provided freight invoices on paper documents, they were compared to tariffs, and checks were sent from accounts payable. Worse yet, many companies implemented no preaudit function whatsoever, simply paying transportation bills as they were received. In today's environment, a large percentage of this labor-intensive task can be eliminated through the automation process and simplification of the pricing concepts. Freight payment today can be done literally in a paperless environment. Freight payment also may now be done within the DOE system or the contractor's system by establishing and using our economies of scale with the freight payment process—not necessarily at a centralized location but in a standard process for all geographic locations.

To differentiate between type of costs and to summarize the five areas comprising total transportation costs, it can be said that freight payments, transportation management, price, and routing costs can all be standardized, automated, and centralized. This would free up the individual packaging and transportation managers and subject matter experts to concentrate on the priorities of the sites which include integrating the packaging function and transportation logistics into the business strategy. (See Figure 1.)

Differentiate Between Types of Costs



Free up transportation management, as a business team member, to focus on executing the competitive strategy.

Figure 1

Today, the huge decontamination and decommissioning cleanup projects constitute a large percentage of the packaging and transportation management work being done. Consequently, if that large percentage is also in an area in which more efficient and effective management techniques can be applied, a significant cost reduction to the taxpayers can be realized. The Council Management concept utilizes more proactive and innovative techniques that can be readily applied in today's environment of changing laws and requirements.

There is a dilemma for the contractors and DOE in this environment in that some cross subsidization will occur. That is, Contractor A may have negotiated very competitive rates in an area with high shipment activity, whereas Contractor B may not have the economy or the freight activity to negotiate volume discounts. Consequently, Contractor A may pay a slightly higher rate in order to accommodate other Council members by providing them with the lowest rate possible. The group rates for the Council are still lower as is the cost to the taxpayer and DOE.

The Council Management process essentially works in a closed-loop environment. As a first step, the cost of transportation is leveraged through total volume and negotiation power of the collective Council members. Secondly, the best buy is selected based on the carrier or vendor availability. A better payment process is then initiated, minimizing the amount of activity required to complete the payment process accurately, avoiding overpayment, and collecting necessary data for effective management reporting. Data collection is a key part of the vendor payment process. The data are then used to measure and track costs and compile management reports and subsequent performance metrics to continue to improve the process.

In developing the initial guidelines for basic structure and operation of the DOE Transportation Council, the charter members developed a Council Mission Statement, a Council Charter (including a purpose, membership requirements, meeting guidelines, voting requirements, and general administrative guidelines), and identified roles and responsibilities of all participants. The Council also nominated and confirmed a Council Coordinator to facilitate Council operations. This dynamic process must continue to move forward through the identification and tasking of future committees and working groups. The Council identified current transportation issues and business strategies and prioritized the critical issues in the DOE transportation environment in order to focus on the most effective and efficient business operational modifications. The Council schedules operational tasks and assigns working groups members. The working groups are then tasked to outline the operations requirements, define reporting criteria, and develop a timeline for implementing the strategy that has been formulated. The Council also reviews the status, progress, and direction of existing working groups.

Figure 2 exhibits the DOE Transportation Council organizational structure.

**DOE Transportation Council
Organizational Structure**

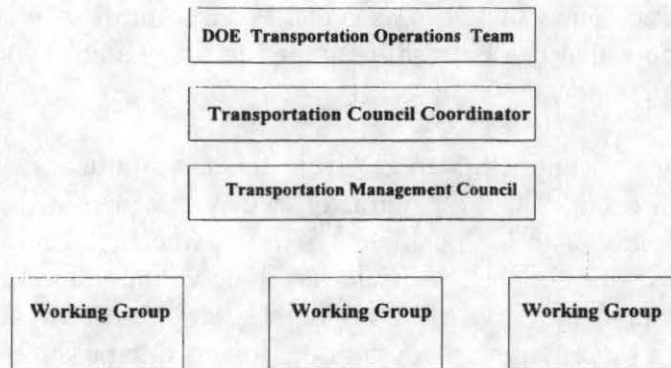


Figure 2

Present Council tasks include household goods rate agreements, small parcel carrier rate negotiation, less-than-truckload motor carrier rate structure proposals, and the centralized packaging procurement concept. For example, the centralized packaging procurement process involves establishing a contracting process through which the various DOE sites can collectively identify specifications for packaging that meet 80 to 90% of the department's needs leaving the smaller percentage as special one-time or low-volume buys. An effort is under way to establish quality assurance requirements for this contracting process to ensure that this can become a one-time event reviewed on an annual or biannual basis. This is opposed to the entire effort being separately processed for each individual contractor presently required to buy packaging. There are also legal issues involved in this process which the Council is reviewing.

Centralized packaging procurement does not necessarily mean there will be one site procuring all packagings; however, there must be a central focal point of the process for it to be successful, i.e., there must be a coordinator to facilitate the operations.

A vendor evaluation team, much like the motor carrier evaluation process, will need to develop a standardized evaluation that can be conducted by any participating member site, and the subsequent evaluation summary can be accepted by all Council representatives. This action alone will result in a significant cost savings due to the elimination of multiple evaluations of similar vendors. Vendor evaluations can be localized so that travel costs and personnel may also be reduced.

Future scheduled DOE Council topics include, but are not limited to, specialized carriers' rate structure (an area of critical importance given the recent finalization of

"Hazardous Materials Transportation Regulations," 49 Code of Federal Regulations, Docket No. HM-169A) and HAZMAT automation (another area of critical importance to DOE). On-site HAZMAT packagings is an area that must also be addressed as it has been established as a requirement now under the new DOE Order 460.1, "Packaging and Transportation Safety." HM-169A regulatory impacts are going to change present operational procedures; however, the Council may be able to ease the economic and operational transition as we move into full compliance with the new regulatory requirements.

A few of the HM-169A impacts of immediate concern to DOE transportation managers include:

- (1) Radiation Protection Program requirements for carriers of radioactive materials. This requirement will likely lessen the number of commercial carriers available to transport radioactive materials, and it will certainly have an impact on small isotope-oriented shipping programs. The impact on the truckload carriers has yet to be thoroughly evaluated.
- (2) There are many classification changes for radioactive materials. Significant to DOE are the changes in the way the low specific activity and surface-contaminated objects materials are to be identified, classified, and transported.
- (3) The A1 and A2 values, as well as other table values, have changed in the HM-169A ruling. Consequently, present routine shipments must be evaluated regarding possible changes in packaging or transportation requirements.
- (4) Significant revisions have been made in specification packagings available for transportation. The highlight of the changes in packaging requirements is the inclusion of the industrial packaging group. The procurement, quality assurance, and vendor evaluation process of these new packagings can be standardized, centralized, and made as efficient as possible through application of the Council Management process.

In summary, the Council's success has resulted from the promotion, cooperation, and coordination among the contractors, DOE, and the packaging and transportation vendors. This process provides for effective human and physical resources utilization throughout the complex and mandates consistent application of our requirements throughout the industry. The Transportation Management Council provides DOE leverage ability in business negotiations and promotes standardization of business strategy and operations.