

Rethink Transportation Service Procurement



Still looking for an effective way to optimise your transportation spend? Try a 'bid event', says Nithin Rajagopal

One fact doesn't change across most supply chains: inefficient transportation spend. Add to it the challenge of ensuring that your¹ current transportation solution aligns with your objectives—should it increase capacity, improve performance, reduce costs, or better still, should it deliver all of those? The challenge keeps getting bigger and more confounding, and one is not even talking of the external factors beating down on your roof.

While it is no longer a seller's market, the slowdown and the almost unidirectional movement of fuel prices seen in recent times have led companies to seek and lock in the most favorable rates from their transportation carriers.

Moving goods from point A to point B is still as simple as it was earlier, but one word defines the need best: efficiency.

The standard of efficiency with respect to cost, time, safety and quality has got as heavy as the question mentioned earlier. Typically, a transportation procurement executive is seeking answers to the following questions:

1. How do I get the best service at the lowest cost?
2. The Rate-Route relationship: What is a good approach?
3. The Analytics: Am I doing it right?
4. Benchmarking: Is it the best solution?

Consider this scenario: You need to transport goods on a refrigerated truck from point A to B, over a distance of 100 km. Considering the fixed cost of, say, Rs 3,000; the ca-

capacity by volume or weight of 1,000 kg; and the transportation cost per weight or per unit distance of Rs 25 per km, you arrive at a cost of Rs 5,500, which you will be paying to your carrier for this lane. What you do not know, however, is that the average cost on that lane could be Rs 4,400. If you are running this lane every week, that's a substantial Rs 57,200 more you paid in a year and here, we are speaking only of one lane among all.

Of course, there may be more to it than meets the eye—flouted contract terms, carriers pulling out of lanes, lanes serviced by ad-hoc carriers, etc. There, however, is a bright side to this story: you are not alone.

Companies all over India and the world are plagued by these inefficiencies and shortcomings in the transportation department. You need to locate and implement the best and the highest value-sourcing transportation solution for your business. This is where a transportation 'bid event' could be the best thing you do to bring your transportation spend in order.

The bid event

Chuck Irwin, former Unilever North America transportation director and e4score.com founder, said it best: Sometimes the best bid event is a no bid event. There are other solutions. For instance, you can try and re-negotiate your contracts, implement a continuous improvement and monitoring program with your carriers and see if these work. They might work well for you, but do bear in mind most of these are reactive approaches. And a word of caution: you

might find yourself resorting to such options more often than you think.

To those seeking a more systematic approach to transportation cost optimisation, a bid event is the answer. However, if you do not have in-house project management skills, it might be better to go to a consulting firm that will get the bid event done for you. A consulting firm with enough experience in conducting bid events will be able to offer you better data management and analysis tools that will reduce the event duration and

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improve the outcome. Bidding can be a complex process. Further and necessary complications include shipper business rules such as restrictions on carrier numbers and limits on the number of individual lanes awarded.

A basic advantage of just going for a bid event, through a consultant or otherwise, is that it opens your eyes to the rates you are being billed at currently, something that you perhaps wouldn't have ever bothered to check. It's like standing beside the guy repairing your old transistor—you might find things in it you never imagined! Depending on how you want your bid event to be designed, it will help you de-

termine the best combination of bids to minimise costs across your TL (Truckload), LTL (Less-than-Truckload), ocean, air transportation networks, while satisfying constraints like price, service level, shipper/carrier requirements, volume discounts and lane bundling opportunities, etc.

Transportation procurement needs to be, at the minimum, an annual exercise, though a half yearly process is not unheard of. New contracts are made, ad-hoc or existing contracts are renewed. Though negotiating new contracts and revising older ones is more or less the process that is followed across companies, the best practice involves a process called 'Integrated Bid Program with Procurement Value Assurance'.

An annual bid exercise for the majority of the business followed by a need-based mini bid works best for all kinds of shippers across industries.

The steps that need to be taken in order to get a bid event going are as follows:

1. Bid Preparation
2. Baseline Preparation

3. Bid Solicitation
4. Bid Optimisation and Rate management
5. Spend Analysis, Bid Selection and Awarding
6. Post Bid Value Assurance

Preparation for bid

You need to decide what to bid for. What percentage of the transportation requirement should you bid out? Which lanes do you want to open the bid for (identifying or defining the lanes itself might be a consuming process)? Which carriers do you want to invite for the bid and which ones do you want to exclude? What kinds of opportunities exist for your preferred carriers and what kind of shipper-carrier relationships do you have to manage? These and a whole lot of other questions need to be answered to avoid hiccups and possible frustration at later stages of the process.

For example, the shipper often wants to leave out certain low-volume low-key lanes to the spot market as it might offer better ad-hoc rates.

When you prepare for your bid, approach it like you are doing a reality check. Before plunging

headlong into the bid process, the shipper needs to test the waters by calculating whether the data collected on lanes corresponds approximately with the actual cost incurred. This baseline preparation and validation is a crucial step as it sets the stage for the bidding process. The results of the bid optimisation are compared to these baseline costs. The lanes, modes, rest breaks and other essential details for lanes need to be finalised beforehand.

Once you are ready for the bid, prepare for bid solicitation. This is where the shipper communicates the information to the carriers and asks them to respond with quotes. But this is not as simple as it sounds. A lot of things need to be taken care of. Details like the level of transparency (you might want to let the carrier know the bids received thus far, without revealing who the carriers are) you want to offer to your carriers, the number of bid rounds that you intend to conduct might differ.

The carriers have to be provided with detailed documentation of the bidding process. An instruction sheet which lists steps to place a bid

Figure 1: Output of bid optimisation worked out on a spreadsheet. Note the spend constraint

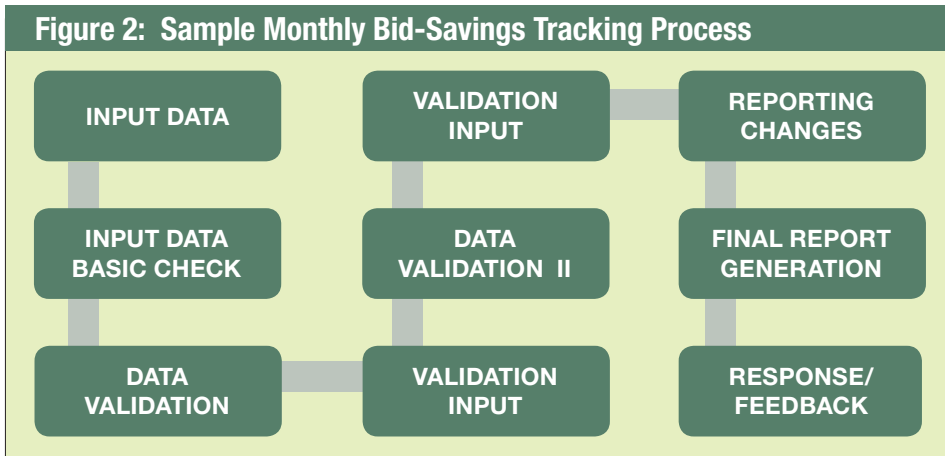
NAME	Baseline		Scenario 2			Incumbent	Broker	Dedicated
	Loads	Spend	Lanes	Loads	Spend			
Carrier 1	5	11,476	28	2,958	2,887,229	X		
Carrier 2	617	1,394,981	33	5,007	4,045,000	X		
Carrier 3	471	353,305	21	2,211	2,301,001	X		
Carrier 4	64	124,369	18	1,159	1,624,060	X		
Carrier 5	12	21,601	20	1,395	1,406,143	X		
Carrier 6			18	799	654,051			
Carrier 7	8	10,085	18	583	602,755	X		
Carrier 8	107	138,407	21	710	733,873	X		
Carrier 9	14	15,514	11	477	646,626	X		

NAME	Baseline		Scenario 4			Incumbent	Broker	Dedicated	Spend Cap
	Loads	Spend	Lanes	Loads	Spend				
Carrier 1	5	11,476	2	68	50,065	X			50,000
Carrier 2	617	1,394,981	29	3,107	2,000,180	X			2,000,000
Carrier 3	471	353,305	5	541	499,354				500,000
Carrier 4	64	124,369	14	582	499,642	X	X		500,000
Carrier 5	12	21,601	2	142	199,331	X			200,000
Carrier 6			8	224	199,942	X	X		200,000
Carrier 7	8	10,085	6	114	100,225	X	X		100,000
Carrier 8	107	138,407	9	244	199,213	X		X	200,000
Carrier 9	14	15,514	2	60	50,240	X			50,000

is not unusual. Usually a 48-72 hour window is provided to the carriers to place bids. Some communication with carriers might be required to explain the process better and clarify doubts. The rules of engagement in case of a tie need to be communicated to them very clearly. You don't want any sparring over who gets a lane while your good waits to be loaded on to a truck!

Typically, having at least two rounds of bidding could serve the purpose. The second round provides an opportunity to the carriers to correct the mistakes they made in the first round and also, more often than not, the second round results in lower quotes from the carriers. The carriers can bid on any number of lanes (you can later place constraints to restrict the awards during optimisation) and the bids can be single or multiple.

After bid solicitation, the next step forward is bid optimisation. My recommendation is to use the tools that are specifically built for carrier bid optimisation services. But the final choice of the tool also depends on the data available, the cost of the tools and finally, your comfort level with the tool employed.



A host of tools are available in the market that can be used to optimise the carrier-awarding process under the business constraints that you specify. An almost unlimited number of scenarios can be run by tweaking the business restrictions and thus varying the bid parameters. Some of the typical business restrictions—that the shippers want to constrain the optimisation runs with—are mentioned under the sub-head 'Business Constraints'.

Once all the final quotes are in and the bidding rounds are over, the carrier responses (quotes) across the different scenarios are analysed. After considering busi-

ness needs and carrier-shipper relationships, lanes are awarded to carriers.

Of course, you don't just pick up the minimum rate on a lane and award it to the carrier. You need to weigh the reliability of the carrier with the price that has been quoted. The backup options on a lane, how critical the customer being served is, the kind of goods being transported on that lane, are just some of the things that you need to consider. Though there is no thumb rule to award lanes to carriers, experience has shown that cost reductions of at least 10-15 percent (in some cases over 20 percent) are achievable.

Other benefits accrued from this process are: Better organised transportation procurement operations, fewer breakdowns, faster and punctual service and strengthened carrier-shipper relationships.

Business constraints

Business constraints form one reason why bidding process to you might be different from any other procurement solution you may have been using or reading about in the past. Incorporating your business needs into the bidding process and getting results that are conditioned to your requirements is complex and best handled by experts who have carried out bids in the past.

This best-practice approach can make all the difference between a hugely successful bid and a bid that just results in existing carriers revising their rates.

The business constraints include:

■ **Minimum/maximum number of winning carriers:** You might not want to take the risk of awarding your entire business to a single carrier; however, you might prefer to contract with a limited number of carriers both to reduce overhead costs associated with multiple suppliers and to give your core carriers more volume so that you continue to be their dominant customer and get preferred service.

■ **Pro-incumbency factor:** Shippers typically favor particular incumbents to be their core carriers or wish to restrict some carriers from serving certain lanes².

■ **Backup concerns:** Saving for the rainy day. You might want a backup option on a lane if the primary carrier can't make it. A shipper may require carriers to submit both bids as a primary and backup service provider.

■ **Minimum/ maximum coverage:** A shipper might want to aggregate the demand and ensure the amount of traffic that a carrier wins

within certain bounds, at a lane, facility or at a business level.

■ **Threshold volumes:** The shipper can specify if it wants a carrier (or a set of carriers) to win either a certain minimum volume on a lane or nothing at all.

■ **Complete regional coverage:** The shipper might want every bid for services from a certain location or within a particular region to be able to cover all lanes from that location or region.

■ **Performance factors³:** There certainly is a trade-off between a carrier's quote on a lane and its ability to service that lane. A carrier may offer a low bid but may not have the capability to fulfil services he promised —this practice is referred to as “lose the auction, win the freight” in the West. You might want to award the lane to the carrier who quoted more but is definitely more reliable.

Technology as enabler

A host of solutions are available that offer optimisation software for bids that involve a substantial number of lanes and carriers. i2 (Freightmatrix, SCS) and Manugistics (Bid Optimiser) are two well-known software solution providers in the bid optimisation software space.

The software can be stand-alone (like SCS) or web based (i2 Freightmatrix). User companies provide their employees with laptops which are capable of running this software. The instructions to the carriers to help them place bids will differ based on the software. For example, the i2 software is web based and the carriers need to be told how to place the bids on multiple lanes and upload the data to the website. This might take some time and effort on the part of the shipper to educate carrier personnel about being tech savvy. On the other hand, having a web-based application ensures greater transparency since the carrier can log in any time and check its bids and the status of the bid process too. Their software lets the bid manager design the constraints and tweak them like the ones described in the previous section.

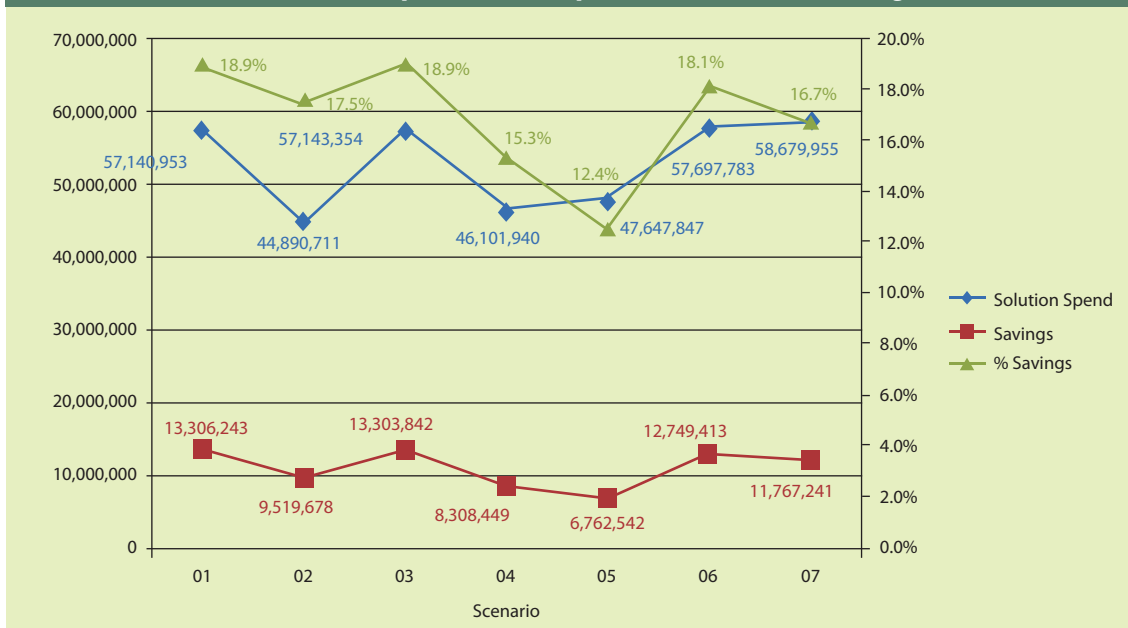
A bid event is not a sure shot cure for transportation inefficiencies. Shippers must note that the optimised solution presents potential or estimated savings. Hanging on to the estimated savings is a challenging task and there are many reasons why all the benefits that a bid event promises do not accrue to shippers. Some of these are:

■ Carriers renege on their rates and turn down loads.

Figure 3: Chart Showing a Weekly Project Plan

High Level View	Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Date	12-Jan	19-Jan	26-Jan	2-Feb	9-Feb	16-Feb	23-Feb	2-Mar	9-Mar	16-Mar	23-Mar	30-Mar	6-Apr	13-Apr	20-Apr	27-Apr
Tasks																	
Business Assessment, Network Creation, Bid Preparation																	
Collect Historic Data																	
Historic Data / Network Review																	
Finalize Carrier List																	
Finalize Network / Bid Design																	
Prepare Bid Related Files																	
Prepare Website																	
Carrier Webcast, Prepare Training Files																	
Round 1																	
Round 1 Carrier Bidding																	
Round 1 Scenario Analysis																	
Round 2																	
Round 2 Carrier Bidding																	
Round 2 Scenario Analysis																	
Final Carrier Negotiations and Contracts																	
Upload Rates to TMS																	
New Rate Lead Time																	
Implement New Rates																	1-May
Milestones																	

Figure 4: Sample Solution Spend and Potential Savings



■ Load planners ignore the plan and get back to the old and familiar ways.

■ Capacity issues with the carrier (carriers over-promise and under-deliver)

A single-line solution doesn't apply. Shippers realise that staying on top of things and realising the potential savings in this case is more difficult than they thought. Internal alignment with key business partners, strategic carrier partnerships, integration of inbound and outbound transportation and identification of key business needs to sustain and spur growth determine the effect of the bid event in the time that follows.

The following needs to be put into regular practice:

1. **Periodic bid savings tracking**
 - a. Estimated Vs Actual savings on the bid lanes
 - b. Can be monthly with corrections observable in the following month
2. **Compliance tracking at various levels, e.g.**

- a. Carrier compliance on the bid lanes
- b. Rate compliance for the awarded carriers
- c. Cost compliance on bid lanes

3. Rapid mini-bid process for new business needs

- a. Bid results for new lanes or for lanes that might now need bidding

4. Quick response resource team to meet analytical needs

- a. Analysis of gaps observed in savings and compliance issues
- b. Feedback, correction and monitoring of corrected areas

Integrated Bid: Benefits

The benefits are many and certainly outweigh the costs involved. As mentioned earlier, even as the process is underway, managers might find loopholes and shortcomings in the existing scheme of things during the preparation phase. Add to this the data gathering from the carriers and processing of lanes and more corrections in the existing system follow. The program thus starts yielding re-

sults even before it has been completed. Typically, such a program enables,

- 1 Overall network cost reduction (typically 10-15 percent)
- 2 Increased load acceptance, better and faster service, happier customers
3. Great carrier consolidation opportunities
4. 'What-if' analysis to safeguard against and prepare for future possible scenarios
5. Better organised Transportation Procurement Process
6. Reduced Payment Issues
7. More than 50 percent of savings leakage plugged by procurement value assurance 🍌

¹ The article addresses shippers or companies that outsource goods transportation services, wholly or partly, to different carriers.

² Caplice and Sheffi (2003) noticed 'incumbents are often favored by 3 percent to 4 percent -- especially on service-critical lanes to key customers or time-sensitive plants.

³ Song, Regan and Nandiraju (University of California, Irvine, 2004).

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