

MULTIMODAL TRANSPORT

A solution for each shipment. Certified as a Multimodal Transport Operator (OTM), Wilson, Sons Logística, bases its strategy on continued investment in training and qualifying its staff in the development of information technology - not in investments in our holdings.

This decision enables the company to achieve excellence through management of its operations backed up by precise and up-to-date information. This intention allows us the luxury of developing the best solution for each client. We practice transparency both in terms of operational efficiency and costs since we have no commitment to heavy investments in our assets.

We believe that by developing, implementing and operating custom-built solutions for our clients' logistics operation, they will be able to hold their focus on their own business. This is one of the ways in which Wilson, Sons Logística provides added value for its clients.

Total Visibility

The option of a single operator generating the whole logistics process brings countless advantages to the client. Complete visibility of the system facilitates identification of opportunities for improvement and awareness of problems, increasing the operator's flexibility for solving possible contingency situations.

Operational Simplicity

Operational aspects are greatly simplified for the client, which will only have to deal with one contact for the entire operation

Based on its experience gained in developing, managing and executing operations in various stages of the logistics chain Wilson, Sons can reduce enormously the complexity of monitoring and managing our clients' processes.

The aspect of a reduced number of partners in the process increases the commitment of those involved, the possibility of identifying optimization factors for the system and the facility of coping with contingency situations.



Scenario Studies

Using simulation techniques and systems, we develop and measure all possible scenarios, for which the respective operational costs, advantages and disadvantages can be demonstrated and compared.

Productivity and Traceability

Monitoring of productivity levels, traceability of the process and the generation of performance indicators are also part of the Wilson, Sons Logística management responsibilities.

MULTIMODAL TRANSPORT

Intermodal Transport Project

Based on a well-structured projects methodology, a highly qualified team make technical surveys, rapidly and efficiently, in conjunction with the client's personnel, searching only for information relevant to the operation.

Based on the data obtained, analyses are made to identify the main project variables and the impact caused by each one in the various scenarios proposed.

The combination of sea, rail and road transport, in advantage is taken of the merits of mode, must take good account of the level of uncertainty in the process, given the irregularity of the sea transport mode.

Since the intermodal operation implies a perfect sequence of stages along the entire system and, taking into consideration the irregularity of ship arrival times, the analysis of the problem must be made on a statistical basis and by simulation, so as to guarantee the required results.

This is due to the fact that the irregular distribution of frequencies, in a more extended analysis of the operation period, has significant impact on important variables of the operation, such as: container transit-times, lay time in terminals, the need for a pre-start-up stock, and other items.



The importance of Simulation Models

The uncertainty of frequencies and capacities of the various modes throughout the period of an operation prevents use of an analytical method of measuring the operation, leading to the generation of inconsistent results.

Simulation has the objective of eliminating the random element present in results obtained, by means of statistical analysis of results in countless simulated cases.

For example, in order to draft out pre-start-up stock, 10,000 events were simulated. The costs and resources for 10,000 different configurations of arrivals at the port of Santos, over a one year period, were analysed. Based on a histogram of container transit-time frequencies, expected minimum and maximum values for container transit-time values were defined, including costs for demurrage and lay time at each terminal.

Advantages of Multimodality:

Container operations for rail and cabotage operations significantly reduces the number of trucks travelling the roads each year;
Both rail and sea transport cause less pollution and consume less fuel per ton transported;
The overall cost to shift one container is less than that to transport the same cargo by road;
The near to zero accident and theft indices place both sea and rail transport among the safest means of transport;

MULTIMODAL TRANSPORT

Management of the Stocks Involved

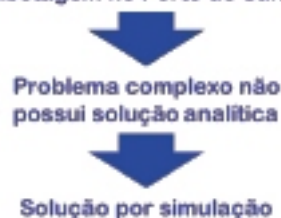
Use of simulation models also makes it possible to estimate more accurately the pre-start-up stock of containers throughout the system (Port Terminal, Rail Terminal and the Client's delivery address), guaranteeing an adequate level of service and maintaining the best cost / benefit ration for the client.

Studies are also made on possible operational alternatives concerning the configuration of assets allocated to each stage of the process. For all scenarios, the productivity of assets employed and the stocks required for maintaining a level of service are analysed for all scenarios. Once all feasible scenarios have been defined by the Wilson, Sons technical team, the resources needed are drawn up and a Commercial Proposal made.

Examples of Modelling Difficulties

- Involvement of the 3 modes: sea, rail and road
- Different capacities and frequencies in each of the modes
- Sea mode with irregular intervals
- Container Transit Time involves return of the empty containers
- Various intermediary storage areas
- Various stocks of containers (full and empty)
- Restrictions in container transit times (demurrage)
- Restrictions at port warehouses
- Other storage restrictions at multimodal terminals

Alto nível de incerteza no processo, em função da irregularidade no intervalo de frequências Ex: Chegada de navios de Cabotagem no Porto de Santos



One Safe Operation

By means of the analyses carried out, we avoid adopting premises that are not consistent. Inconsistency would lead to false scenarios and, consequently, under-sizing of operational cost values and the consequent operational and financial non-feasibility, which would most certainly be identified in only a short period of time.

Contingency Situations - are also taken into account in the project for situations that happen during the operation. Plans determine measures to be taken and responsibilities for each of the situations that could occur.

Cargo Tracking

Wilson, Sons Logística has developed a system of tracking cargo which enables the client to have complete on line "visibility" of the operation :

Protected by a login and a code number, the client can access consistently updated confidential information concerning transportation of his merchandise.

Tracking is done in accordance with the client's pre-determined events, recorded on the tracking system on conclusion of each stage of the operation. The system can also have parameters for up-to-date forecasts on when the next event will be concluded, based on the progress of the operation.

Using this system, the client and the logistics operator know exactly when and where the shipment has been during the whole trip. This enables decisions on when to resort to contingency action, or other emergency measures in the speediest and most pro-active manner, reducing the possibilities a supply failures and instilling greater reliability to the operation as a whole. Performance Indicators

The information accumulated in our system permit operations to be mapped out by various performance indicators, such as:

- Total transit-time for the operation (maximum, minimum, average and by container)
- Transit-times for each stage (maximum, minimum, average and by container)
- Maximum, minimum and average stocks for each stage of the system
- Total stock for the system
- Percentage of positive results for pre-defined transit-time predictions.

These and other indices, which can be defined in accordance with client needs, help Wilson, Sons Logística in identifying opportunities for improvement and optimization of the system



MULTIMODAL TRANSPORT

Multimodal Way Bill (CTMC)

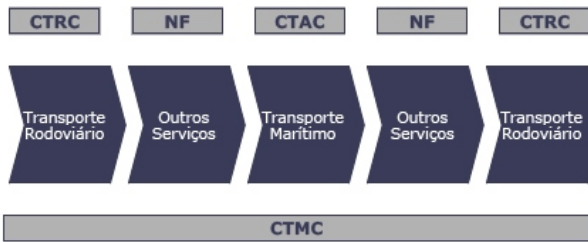
Multimodal cargo transport can be speeded up by using fiscal documents.

The Diário Oficial (Fed. Gov. Gazette) published, on 15/10/03, the "Ajuste SINIEF-06/03" document, which institutes the Conhecimento de Transporte Multimodal de Cargas (CTMC) as the fiscal document to be used by the Multimodal Transport Operator (OTM).

This is the Multimodal Transport Operator's invoice. With it, the operator will have, in a single document, the service provider contract and the fiscal document required by the State and Federal District (Brazilia) Secretaries for Finance.

Multimodal Cargo Transport, as defined by Law 9.611/98, is that which, governed by a single contract, uses more two or more modes of transport - waterways, roadways and railways, etc from start to finish of the journey, carried out under the responsibility of a sole OTM (Multimodal Transport Operator).

Today, the only encumbrance to the use of a CTMC resides in the question of insurance.



OTM (MULTIMODAL TRANSPORT OPERATOR) Insurance

At this time, formulation of OTM official policies is in the study stage, albeit at an advanced stage. Discussions to this effect involve brokers, Brazilian insurance companies, the IRB (Brazilian Reinsurance Institute) and foreign-based re-insurers.

The clauses have even been developed and drawn up, depending on final adjustments for compatibility with the Brazilian Civil Code. However, up to now, not one policy has been issued. It is possible that new developments will shortly be announced.

ICMS Goods and Services Tax

Details concerning ICMS (Goods and Services Tax) have been defined in "Ajuste Sinief 06/2003" of Confaz (Treasury Policy Council), which states that the Multimodal Transport Operator (OTM) can receive credit for ICMS amounts already paid by the transporters at each stretch of the journey, as shown in the following example:

Each of three service providers will issue a way bill (CTMC and CTMC) and pass on to the Multimodal Transport Operator (OTM). These way bills will be for the amount of the entire journey and the amount of ICMS paid up to that point will be clearly inscribed on the document.

Situation without issue of a CTMC (Conhecimento de Transporte Multimodal de Cargas).

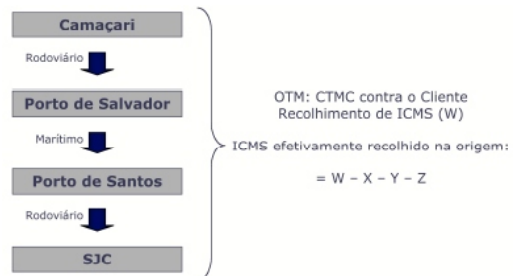
For the purpose of this example, let us suppose that the ICMS settled by Service Providers A, B or C was respectively R\$150, R\$240 and R\$130.

The Situation with issue of CTMC

On issuing the Multimodal Way Bill (CTMC), the OTM (MULTIMODAL TRANSPORT OPERATOR) will then put down the total value (theoretically greater than the sum of the 3 individual values) and will inscribe the ICMS due. For the sake of this example let us suppose that the due value is R\$ 700.

Thus, at the time of settling the tax payment (at the end of the month or the subsequent month), the OTM will present the CTMC with the other way bills attached and will then settle his tax account for only R\$ 180 (R\$700 less R\$150, R\$240 and R\$130)

The ICMS for each provider will be settled at the point of origin. Example: State of Bahia for Providers A and B and the State of São Paulo (SP) for provider C. In this way, the State of SP will not lose anything on the OTM operation, since the ICMS due there will still be able to be settled there.



Book a visit from our sales department
logistica@wilsonsons.com.br
 Phone: (21) 2206-4276