



# supply chain strategy

A newsletter from the MIT Center for Transportation & Logistics

## Give Your Transborder Supply Chain a Strategic Lift

Raise the profile of trade compliance to avoid running aground at national borders

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**THINK OF ALL THE PLACES** where your international supply chain can be disrupted. Chances are national borders are probably high on the list. That's why companies employ teams of trade compliance experts to shepherd cargo from one country to another.

The problem is that while these specialists are still needed, their services are no longer enough. Globalization and stricter security regimes have made transborder movements more complex, putting the integrity of end-to-end supply chains at much greater risk. Companies should realize that the border is an integral component of the extended supply chain, and movements across it need to be managed just like every other component does. As an executive from a global electronics manufacturer that operates in more than 150 countries put it recently, "We can have the most incredible manufacturing process and the supply chain dies as soon as it hits the border."

To mitigate these risks and make their supply chains more resilient, companies need to reevaluate the management of goods moving between countries. They need to go beyond traditional trade compliance and take a more strategic view of the transborder supply chain.

### Many variables

The transborder supply chain represents a company's ability to move goods and services across international borders. As a concept it is less well developed than the end-to-end supply chain, but is gaining in strategic importance. It is one of three key components that international supply chains must have to be competitive. Those components are Secure, Transborder and Resilient, or STAR, supply chains.

The transborder supply chain helps to maintain trade flows across national boundaries in the face of more regulatory complexity, in the aftermath of a physical disruption to a port, or any other event that disrupts international operations.

Last summer global technology company NCR Corporation, headquartered in Dayton, Ohio, got stuck in the transborder mud. The customs authorities in Brazil held up the company's shipments, and since it was the end of the quarter there was a lot of pressure to break the logjam as quickly as possible. The reason for the delay: the Brazilian national soccer team was playing in a World Cup game and customs had shut down for the occasion. When NCR's director of global logistics, John Mascaritolo, informed senior management, "it did not fly too well as an explanation," he told attendees at the recent Council of Supply Chain Management Professionals annual conference in San Antonio, Texas.

Thankfully this is not an everyday occurrence — even in soccer-crazy Brazil — but the incident underlines how companies must be ready to handle unexpected border snafus as they expand globally. "Eighty-five percent of what we know is basic; it's the 15 percent that

hurts you," said Mascaritolo. A country's obsession with its national soccer team falls into the latter category.

But cultural differences are the tip of the iceberg when it comes to border issues that can unseat your supply chain. Traditionally the U.S. has focused more on incoming goods rather than exports, but in many other countries the export process mirrors that for imports. You must be prepared to navigate trade regulations and practices that vary tremendously between countries and even regions. In Brazil, for instance, customs clearance procedures and goods classification codes "change all the time," Mascaritolo said. And in China expect shipments to be heavily scrutinized in Beijing but less so in Shanghai. Regions in the north of India tend to be less restrictive than those in the south, he advised.

### Security hurdles

Supply chain security has become a pervasive business issue and it is at the nexus of international trade — the points where goods cross national borders — where the impact is particularly onerous. As governments extend security mandates deeper into global supply chains, companies must meet multidimensional security needs to keep their goods in motion.

In June 2005 the World Customs Organization adopted the "Framework of Standards to Secure and Facilitate Global Trade." The framework incorporates the concept of public/private sector partnerships to improve supply chain security and envisions supply chains composed of "authorized economic operators" that comply with international security standards. It calls for international cooperation among customs organizations to inspect cargo deemed to be high risk before it is loaded at the port of export.

The WCO framework actually is the culmination of a series of international regulations and initiatives intended to make supply chains more secure while requiring higher levels of complexity in the process. In many countries, and most notably in the US, this process is still evolving.

In October 2006, President Bush signed into law the Security and

**[Key Takeaways]**

- » As moving goods between countries has become more complex, so the transborder supply chain has gained in strategic importance as a component of the end-to-end supply chain
- » Traditionally the transborder supply chain has been managed by trade compliance specialists. Although these professionals are still needed, senior managers need to take a more active role in managing cross-border movements

Accountability for Every Port Act (SAFE) that requires the US Department of Homeland Security (DHS) to develop plans to resume trade and minimize economic loss should a terrorist act occur at a port. This is a far-reaching requirement. Companies must anticipate how the DHS will police trade flows after such an incident. Those organizations that are not prepared could face serious disruptions. For example, companies with supply chains that do not conform to the official definition of what constitutes “secure” will be the ones that are shunted to the back of the clearance line. That could mean protracted delays, unhappy customers and an opportunity for better prepared competitors to take advantage of the situation.

SAFE also reinforces various security measures that the US government has put in place in other parts of the world. An example is the Container Security Initiative, where foreign ports notify the US government of shipments bound for the United States, which will be expanded. And the use of various security technologies such as radiation monitoring equipment will increase under the act.

More initiatives are in the pipeline. The DHS wants to improve the quality of the information available on import containers bound for the United States before the boxes are shipped. More detailed information would enhance the risk assessment and targeting strategy that is central to the DHS’s approach to trade security. The present system, which requires ocean carriers to submit cargo manifest information on such shipments 24 hours before sailing, has been deemed as inadequate. Thus the DHS has proposed the so-called “10 plus 2” initiative because it would require 10 data elements to be submitted 24 hours before a vessel is loaded (e.g., manufacturer name and address and country of origin) and two additional elements from carriers (the vessel stow plan and container status messages). Industry groups are soliciting feedback from their members on the proposal.

## Counter-measures

Despite these complexities the management of the pivotal transborder supply chain still tends to be lumped under trade compliance. The growth in globalization over the last decade or so has increased the focus on supply chain efficiency and multidisciplinary management teams. But the crucial transborder component stays parked in its usual functional slot in many organizations — a role largely confined to making sure that customs entry documents are filed on time and cargo is cleared expeditiously.

There has to be more strategic oversight if companies are to avoid disruptions that undermine the efficiency and responsiveness of global operations. In addition to the added risks described above, global businesses are more vulnerable than ever to unexpected supply chain disruptions. Finely tuned, just-in-time and build-to-order manufacturing systems are intolerant of border delays.

The new framework is still emerging, but there are a number of steps companies can take to bring the transborder supply chain out of the back room and into the strategic light.

### Revamp the management structure

Trade specialists such as compliance managers still perform vital functional tasks, but overall responsibility for transborder movements needs to be elevated in the management hierarchy. Senior managers have the power to build transborder challenges into supply chain design and planning strategies. “We see larger companies hiring executives at the level of vice president to manage global sourcing, imports and exports,” said Colin Taylor, Global Sourcing and Import Logistics, IBM Global Business Services, based in Piscataway, N.J.

Also important is forming cross-functional teams “to build a roadmap for end-to-end import and/or export processes and the infrastructure to support them,” he said. Break down the traditional

silos that separate functions such as transportation and sourcing to establish this cross-functionality. “Some companies are now considering merging these and other functions to ensure that product flows are smoothed and those involved have common, end-to-end performance goals,” Taylor explained. As an example, when making sourcing decisions companies need to compare the estimated landed costs with actual landed cost and adjust product margins accordingly, an analysis that requires input from logistics, compliance and finance functions.

Information systems need to be aligned with this multi-disciplinary approach. Taylor said that exports and imports are commonly managed in unconnected spreadsheets and databases that reside in different departments. As a result this information “is not integrated and gaining visibility and control requires lengthy analysis and cross-referencing. This is highly labor intensive with many redundant activities.”

### Outsource or in-source?

You may want to consider bringing some or all freight forwarding functions in-house to give you more control over transborder operations and enable you to identify more opportunities for eliminating inefficiencies. Taylor noted that leading companies often have the trade lane densities to justify in-sourcing these activities. Such a capability “reduces the business risks inherent with highly-regulated transborder trade and reduces overall freight costs,” he said. But taking the in-house route also depends on “whether low-cost country sourcing is seen as a strategic advantage by senior management,” he pointed out.

Also keep in mind that local trade representatives are still important since they offer the contacts and experience necessary to help expedite transborder movements. Mascariolo finally got his shipments into Brazil despite the country’s soccer-induced state of paralysis, mainly due to the efforts of his local customs agent and freight forwarder, he said.

### Select contractors that deliver on global promises

When using third-party services providers “make sure they know the country and don’t just have an office there,” advised Brad Gray, global director, purchasing, The Dow Chemical Company. Dow stumbled when the company decided to standardize its use of third-party logistics service providers by employing the 3PL it used in North America to manage its shipments in overseas markets. “It failed because our processes were not global but regional.” The 3PL had offices in Europe “but they did not know the countries,” he said. It took Dow more than a year to extricate itself from the failure. Thoroughly research service providers that claim to be international before giving them business in other countries. “Global is an easy word to print,” Gray warned.

Moving goods across borders used to be the sole province of the import department and the customs broker. Companies that recast the transborder supply chain as a crucial component of global operations can gain competitive advantage from increased resiliency and a more efficient end-to-end supply chain. ♦

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