# Case Study

# Supply Chain Risk Management: USAID | DELIVER PROJECT, Task Order 5



Health commodities being delivered in Benin.

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In 2010, the management team of the USAID | DELIVER PROJECT task order for procurement and distribution of essential public health supplies (Task Order 5) met in a workshop with USAID representatives and technical assistance consultants to begin a completely different approach to managing their activities. The stated objective of Task Order 5 was to improve how they provide public health commodities to USAID-supported programs; the goal was a targeted delivery-to-promise of 95 percent. The new approach sought to do two things: 1) identify the risk events that caused the most interference in reaching mission objectives, and 2) direct management attention to strategies explicitly focused on dealing with these risk events.

# Drivers of Risk Management Approach

Dissatisfaction with prior management approaches in procurement and distribution had been the main driver for the new risk management approach. USAID representatives observed that, in the past, certain foreseeable adverse events had compromised mission performance; they thought a management approach that directly targeted these events would be more successful.

Additional drivers for the new risk management approach was a sense that the approach could be used to intelligently prioritize areas that needed attention within the task order and, more important, develop a consensus around this prioritization, across stakeholders. In this way, the expectations for mission performance, with its strengths and weaknesses, could be collectively agreed upon.

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# **Components of Risk Management Approach**

The new risk management approach began during the first two months of the task order's activities, with the draft of the overall Monitoring, Management and Risk Mitigation (MRM) plan. The MRM enumerated specific, foreseeable risks to achieving the 95 percent goal and the steps that would be taken to address these risks. The final draft of the plan was generated during a workshop with USAID representatives and risk management technical assistance consultants.

#### **Risk Assessment and Evaluation**

Prior to the workshop, the task order management team put together a list of risk events, based on experience, which was validated with other partners before the workshop. See table 1 for a list of the risk categories and risk events.

In evaluating the risk, each risk event was assessed with respect to the likelihood, extent of its impact, and its ability to be detected. A 10-point rating scale was used to score each of the features of the risk event. A risk profile number (RPN) was computed from these scores. Risk events with an RPN of 100 or greater were considered worthy of attention; in general, risk events could be prioritized by ranking, based on the RPN. The workshop shared these risk evaluation results and all the relevant stakeholders agreed on them.

#### Risk Treatment

Some initial plans were also generated to address the risks identified in the workshop. After the workshop, small work teams, comprising individuals with relevant experience, further refined these plans. These work teams eventually assumed responsibility for implementing the plans, which included—

- identifying responsibilities for different parts of the plan
- developing timelines for activities
- determining the expected effect on risk by the effect on scores for impact, likelihood, and detection; and the resulting RPN
- developing preventive actions
- planning strategies for occurrence and for reducing impact
- developing risk communication protocols.

Plans were also product-specific, where required.

## Improvements to the Risk Management Approach

Within two years, improvements were made to the risk management approach.

### **Risk Monitoring**

Innovations were introduced to help provide an early indication of when a risk event was more likely to occur and to help understand what mechanisms were driving the risk events. For example, the task order team started to track the reason for emergency orders to identify how many orders the managers could actually affect. A commodity registration tracking across product categories was also introduced. Finally, a tool was developed that could aid in identifying the likelihood that countries would place emergency orders, based on information about country activities.

#### **Risk Performance Monitoring**

Finding it difficult to evaluate objectively whether the risk management approach was successful, in the second year, the task order team identified metrics for many of the risk categories that had been identified during its risk evaluation activities. No new metrics were created; but, instead, existing metrics were repurposed for risk performance monitoring. See table 1 for the metrics.

#### Learning

Through risk monitoring and risk performance monitoring, the task order team has and can continue to generate evidence-based data that can support changes to the risk management approaches. The team now tries to better understand both the donor process and the partner needs. They also work to have more visibility into partner shipping plans and inventory, where they can simultaneously aid general risk evaluation and the impact of any ongoing events. In addition, risk categories have evolved, somewhat based on insight into how risks are interrelated.

#### **General Evaluation**

The benefits of the risk management approach have included a general sense within the task order team and communicated by the client—USAID—that there is a high-quality planning and management process. This collective assessment is partly due to the collaborative approach used to implement the initial risk management plan. In addition, performance metrics support this perception. First, the percentage of countries that could not ship due to registration errors fell from 14 percent in March 2011 to 2 percent in June 2012. Second, the percentage of emergency orders fell from 28 percent for 2011 to 18 percent for 2012.

Challenges still remain, however. Consistent re-evaluation is sometimes difficult because the scale is subjective. Finally, the task order team realizes that they have a low level of control over certain risk events. This realization is leading to a refinement in both the risk treatment strategies used for these risks and the expectations communicated to clients and partners.

Table I. Risk Categories, Events, and Metrics for Risk Performance Monitoring from TO5

Risk Category	Risk Event	Metric
Product Registration	Product not registered in time	Percentage of countries that could not ship due to registration errors
	Product shipped but not allowed incountry	
Mission ordering and expectations	Missions do not understand how to plan supply and submit orders correctly, within a reasonable time.	Mission orders for more than I product for next year? Percentage of emergency orders
Supplier performance	Supplier has production problems.	Percentage of supplies released by supplier within 7 business days of goods available date
	Products do not meet quality standards.	Lot acceptance rate
	Supplier requests a product recall. Number of recalls in a spec period	Number of recalls in a specific period
Funding	Funds not available when needed for procurement actions.	

	Missions do not provide adequate funding for orders.	
Forecasting and production planning	Unable to fulfill unplanned orders because of insufficient data to support good forecasting.	Planned orders as a % of actual orders
Inventory and stock levels (stocked items)	Inventory falls below optimal levels for several consecutive months.	Percentage of products in inventory >15% of forecasted demand
Freight forwarding	A. Shipments are not delivered on time because of shipper error.	Delivery to Plan (DTP) reasons for late shipment (% with this reason)
	B. Pre-clearance process documents not received in time to clear shipment.	DTP reasons for late shipment (% with this reason)
Quality assurance	A. Product is received that does not meet quality specifications.	Lot acceptance rate
	B. Testing lead time effects on-time deliveries.	DTP testing ≤ 4 wks. (% with this reason)
Warehousing	Warehouse does not manage inventory properly for storage or pick and pack.	DTP warehouse metric (% with this reason)

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