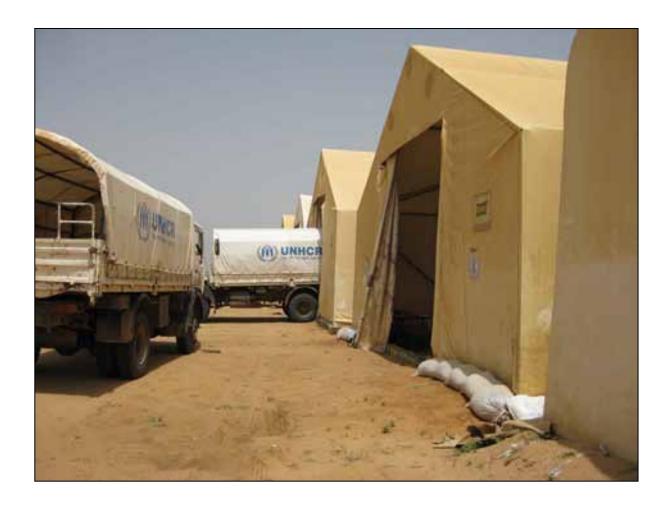
Assuring effective Supply Chain Management to support UNHCR's beneficiaries

An independent evaluation commissioned by the Policy Development and Evaluation Service



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PDES/2008/10 December 2008









Executive Summary

As part of an effort initiated by the senior management of UNHCR, Fritz Institute was invited to assess the functioning of the end-to-end supply chain today. Our goal was to understand the obstacles inhibiting integrated supply chain management, to look at current capability, and to make practical proposals regarding improving supply chain performance. Since August we have spoken with more than a hundred people to understand the perspectives from Geneva, Budapest, and the field. Our time in Syria, Jordan, and Chad allowed us to view things from the beneficiary's perspective.

We also benchmarked UNHCR against four other humanitarian organizations, and attempted to analyze the organization's performance from a quantitative perspective. Data is hard to come by, dubitable, and very difficult to manipulate. While not fully complete, the quantitative and anecdotal insights (internal and external) point to some serious supply chain management problems.

Throughout the project we focused our investigation and analysis on six critical areas: organizational will, supply chain strategy, processes, information integration and tools, people, and relationships.

Significant Supply Chain Accomplishments

The Emergency Response supply chain is a major strength for UNHCR. It is well-integrated, well-supported in terms of people and funding and therefore performs very well. EPRS and SMS work well together to set and manage the strategic stockpiles in Dubai, Copenhagen, and Durban. Recent emergency response operations in Georgia, China, Myanmar, Chad/Cameroon, and China have gone well. This is an example of how an integrated supply chain can work with cross functional teams and a well-orchestrated support structure. The response to the Pakistan earthquake is a recent example where EPRS, SMS, and the country office worked together to look for local sourcing by conducting market research and adjusted the contract rules to do local procurement.

The move of the Supply Management Service (SMS) to Budapest and the subsequent increase of personnel have been positive. The team seems well-installed and the increased capacity is proving itself. For example, visits to support the field have been made in many countries (Chad – Douala corridor visit, Jordan – operations review). SMS has realized substantial cost savings in several areas.

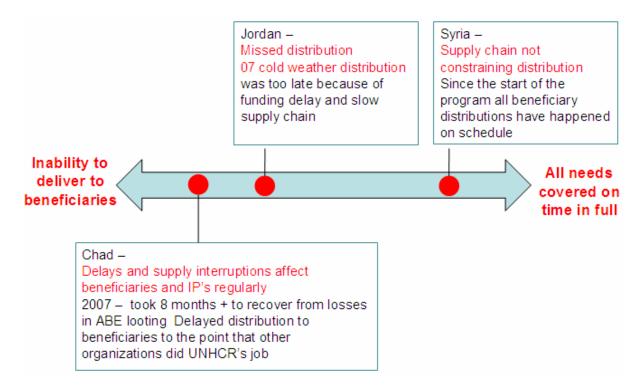
Supply chain processes in the field are starting to change in a positive way. Decentralization of PO placement has been implemented – with a few remaining countries, and most offices are using MSRP supply module to place purchase orders directly with SMS. Full functionality of MSRP is expected to be in place by 2010.





Current State

Weak supply chain processes seriously impede the timely delivery of goods to camps, which affects both programs and beneficiaries. While the lack of hard data makes it impossible to quickly assess the magnitude of the impact on beneficiaries, anecdotal evidence from the field visits point to both significant impact on beneficiaries and to the weakness of supply chain processes.



Currently, UNHCR is caught in a vicious cycle, in which the organization's focus on paperwork and record keeping reinforces an audit mentality and leads to weak supply chain processes. While the culture of procedural compliance shows an organization of strong discipline, supply chain controls are translated into administrative terms and, as a result, supply chain management is not on the agenda for top management or the teams in the field. Since the staff is busy with firefighting, no resources can be applied to improving processes and getting out of the cycle.

An audit mentality focuses on accounting and administrative transactions and distracts from sound business practices.

- Frame agreements fulfill audit requirements but do not address business needs such as outlining price or volume commitments.
- Warehouses have multiple signed copies of transactions, but no monthly snapshot of inventory.

Broken supply chain processes are evident at all levels in the organization.

- Excessive delivery lead-times impact beneficiary distribution.
- Lack of pipeline visibility frequently results in materials being held in transit.

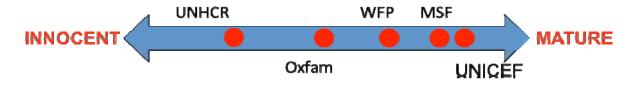




Focus on firefighting and work arounds take precedence over future planning.

- Field resources are consumed with tactical activities which detract from planning or designing for systemic improvements.
- Lack of funding and timing of funding create irrational seasonality in the business that does not reflect true needs.
- Inability to build correct infrastructure creates more work for all.

As shown on the continuum below, other humanitarian organizations that had been in a similar situation have turned attention and resources to supply chain management and made great progress. Top management at UNICEF realized that they could not succeed in meeting the needs of the Millennium Development Goals and pushed the organization to develop a supply chain strategy and find the human resources to succeed. The number of supply chain people at UNICEF has increased dramatically in the last few years, while the number at UNHCR has dwindled. WFP has strategically established itself as the Logistics Cluster lead with resources, both financial and human, behind it. This is a self-reinforcing position in that WFP now uses its position as cluster lead to appeal for funds. Oxfam consciously decided 3 years ago to invest in their supply chain when it was clearly demonstrated that supply chain had an important role in fulfilling the organization's objective. They also felt that the sector itself is undergoing change and becoming more competitive and that they could be squeezed out if they did not improve.



The Path Forward

Senior management must commit to change. It must give supply chain a place at the High Commissioner's table. Supply chain management is not a core part of UNHCR today, though people remember with fondness the power that UNHCR logistics had 15 years ago. Before one can discuss how to change, the Commissioner and the senior team must first accept their responsibility in driving change. This commitment or organizational will must be evident, concrete (in terms of mindshare, funding, and breaking barriers) and consistent in order to enable a transformation from supply chain laggard to supply chain leader.

In addition to attention, the leadership and organization must also expand their vision from supply to supply chain management. The organization lacks a common understanding of supply chain management, and currently focuses on functions, audit, and individual accountability, rather than on the delivery of goods and services. The executive team needs to play a critical role in breaking down functional barriers.





Once senior management is on board, UNHCR must transform in five key areas. UNHCR must:

- Use STRATEGY to guide and simplify supply chain process development and execution. Identify an owner for supply chain strategy, work on the overall picture, and demonstrate the opportunity by developing supply chain strategy, implementing strategic change and measuring success to drive further actions.
- Manage PROCESSES, not functions. Define process-oriented targets that allow teams to plan, do, check, and act. Break out of the cycle of firefighting; instead improve through learning, measuring, and responding.
- Use DATA and TOOLS to manage, monitor, and set priorities for improvement.
 MSRP is not useful in its current state and must be further developed to
 incorporate the needs of all users including implementing partners and logistics
 partners. Push for the final implementation necessary to provide supply chain
 visibility and give the field tools useful for day-to-day management.
- Empower PEOPLE to fuel continued learning and supply chain development. Today the structure and policies of UNHCR's Human Resources is a major barrier to progress. Hire the right people, promote and train others, and give people a reason to stay with supply chain as a career.
- Establish collaborative RELATIONSHIPS that fuel savings and performance improvement. Implementing partners require training, guidance and management. Vendors (service and product) must be vetted and managed – no "out of sight out of mind." Interagency involvement needs to be defined strategically with adequate funding and support.

Risks and Rewards

UNHCR has made progress over the last few years in re-aligning their supply chain priorities. Investment in SMS has produced significant cost savings, allowing them to increase the number of staff; commitment was made to further develop and implement MSRP as a supply chain tool. Today, the entire sector is undergoing change where organizations are assessing their strategic objectives, donors are shifting their priorities, and inter-agency collaborative initiatives are maturing and undergoing reform.

UNHCR could choose to do nothing, but the stakes seem quite high. Risks include, most importantly, ongoing delays and disruptions in deliveries to beneficiaries, increased funding pressure due to lack of credibility, and further erosion of basic capabilities that make recovery even more difficult. Investing now in supply chain management should allow UNHCR to be successful in its mandate to protect, offer assistance, and provide durable solutions to the beneficiaries. Further gains include efficiency of delivery, availability of goods, competitiveness, and credibility in the humanitarian world leading to increased fundraising potential. The integrated supply





chain is the basis for the future, the foundation for serving the people UNHCR aims to protect.

In envisioning the path forward, we identified the top five strategic opportunities, as shown below:

Top Five Strategic Opportunities

Create a world-class supply chain for emergency shelter that can be used by all cluster agencies

Adapt best practices from ER supply chain to the mainstream supply chain, start with one or two important mainstream commodities

Improve competence level and retention of field logisticians through better recruitment and training

Use PDCA to improve supplier-to-camp delivery process using a cross-functional and a cross-partner team

Meet with the High Commissioner quarterly to discuss supply chain performance using the Supply Chain Dashboard which consists of 5-7 Key Performance Indicators





Acknowledgements

The Fritz Institute team would like to thank everyone at UNHCR for their support and commitment to this project. Everyone whom we interviewed was very forthcoming with their ideas and feedback, without which we would not have been able to collect the required data or to perform our analysis. SMS was especially accommodating in this regard.

In particular, we would like to thank the executive office of UNHCR, whose cooperation and contribution is essential to the success of these results.





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1. Introduction

Stakeholders and Objectives

- Stakeholders
 - L Craig Johnstone
 - Judy Cheng-Hopkins
 - SMS

- Steering Committee
 - PDES, Executive Office,
 SMS, DOS

To understand delays and blockages in the existing SCM operations

To set realistic expectations regarding the capability of the SCM operations given the current state

To make practical proposals to assist the organization in overcoming these obstacles and improving supply chain integration

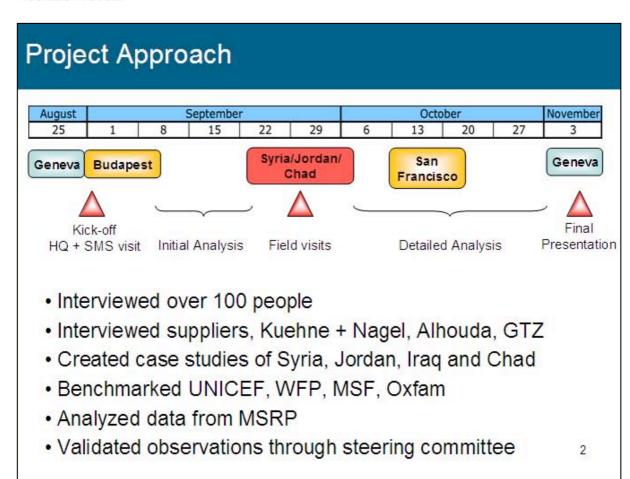
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As an operational humanitarian organization, UNHCR has an obligation to ensure that it can deliver the right goods to the right place at the right time and at the right price. Anecdotal evidence suggests that this objective may not always be achieved, especially in the context of emergency operations. This issue is of growing concern to UNHCR, not least because of the new responsibilities that the organization has assumed under the Cluster Approach. The Executive Office has consequently requested the Policy Development and Evaluation Service to commission and manage an independent review of UNHCR's supply chain management function.

The overall purpose of the review is to improve the effectiveness and efficiency of UNHCR's supply chain management function by developing a better understanding of any delays and blockages that take place in the procurement and delivery of goods. Given the current state of operations, the review will provide UNHCR with a better understanding of what can reasonably be expected of the organization's supply chain capacity, and seeks to make practical and financially feasible proposals that will assist the organization to overcome such obstacles. Finally, the review will help the organization to position itself more effectively in a rapidly evolving inter-agency environment.







To meet the goals of the review, the team first traveled to Headquarters in Geneva. We spoke with UNHCR staff involved at various levels of relief operations to gain a high-level perspective of the capabilities of current supply chain functions. We traveled to Budapest to interview a number of people in the newly relocated SMS group. A broad panel of people had been selected for us to interview, and everyone that we met was very open and provided candid remarks. This initial phase of the project provided us with the necessary context to begin our initial analysis and to prepare for the field visits.

With the input of the Steering Committee, Chad and Syria/Jordan were chosen as case studies for this review. We recognize that every UNHCR operation is unique and presents its own challenges, but believe that the choice of these two operations would represent a number of challenges that are common across the board. Two members of the team traveled to Syria and Jordan to gain perspective on the regional Iraq support, and then to Chad to learn about an operation which is widely regarded as one of UNHCR's most logistically challenged.

We also interviewed representatives of major UNHCR partners Kuehne & Nagel, Alhouda, and GTZ. One of our objectives was to establish a context for UNHCR's supply chain function as compared with peers in the humanitarian world, and to that end we spoke with representatives of UNICEF, WFP, MSF, and Oxfam. All told, we interviewed more than one hundred people who either work for or closely with UNHCR. We were able to get a clear sense of the problems that UNHCR encounters on a regular basis, and of potential solutions.





Significant Accomplishments in UNHCR supply chain

- ER stockpiles in Dubai, Copenhagen, and Durban support emergency response well
- Recent ER operations have gone well (Georgia, China, Myanmar, Chad/Cameroon, China)
- EPRS working well with SMS
- SMS organization has been moved to Budapest and staffing increased
- Decentralization of PO placement has been implemented with a few laggard countries
- MSRP supply module has been implemented in most countries and is used for PO generation. Full functionality expected by 2010
- SMS organization has realized substantial cost savings in several areas

3

Supply chain improvements have already begun to happen. Emergency response gets high marks, especially for big media attention emergencies such as the recent crisis in Georgia. Even suppliers and partners talk about UNHCR's ability here. Emergency response is an area where the EPRS team and SMS and the field have coordinated their efforts and communicated well; they are also becoming more strategic in creating stockpiles to be able to deliver quickly and efficiently. Recent operations point to how well they have performed.

UNHCR's achievements in high-profile emergency situations is an example of how an integrated supply chain can work with cross-functional teams and a well-orchestrated support structure in charge of market research and local procurement;. For example, the Pakistan earthquake is a recent operation where EPRS, SMS, and the country office worked together to conduct market research to seek out local sourcing, and adjusted the system to do local procurement. These achievements can be used as good models to replicate for the mainstream operation.

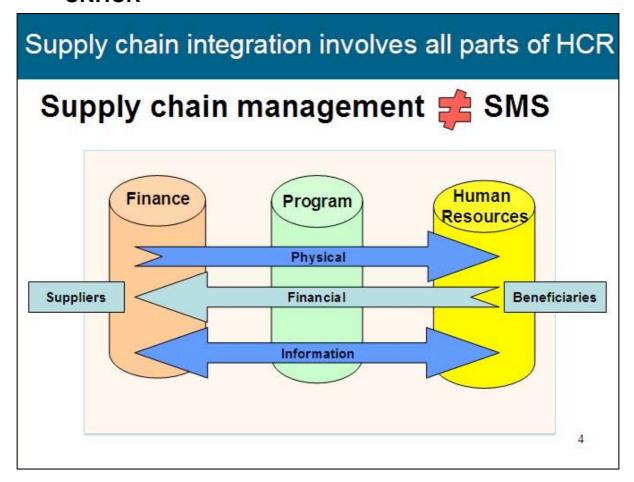
The MSRP supply module implementation takes a monumental effort to implement but good traction and the IPSAS push should mean the system is "fully functional" in 2010. MSRP has been implemented for procurement; the decentralization effort where the field offices work directly with SMS to procure goods has been implemented in many countries and seems to be working well.

SMS has also been involved in cost savings to demonstrate that the right amount of investment can yield significant costs savings, but they are also working on improving each of the functions for better future performance.





2. "Against All Odds": The Current State of SCM at UNHCR



From our interviews, we learned that UNHCR is viewed internally as having a strong silo culture; integrated supply chain management is a different concept that cuts across diverse functions. Figure 4 shows that integrated SCM focuses on end-to-end management that ties the suppliers to the beneficiaries. It is important to note that an integrated supply chain is not the responsibility of a single department such as SMS but is a truly coordinated effort within the organization.

Here are the top ten signs that your operations are not integrated:

- 10) You cannot give your manager an accurate ER stock report worth millions of dollars.
- 9) Your internal customers are slow to transfer the budget to replenish stock.
- 8) Project managers have no visibility of purchase order status and shipment status.
- 7) You don't know how much material you used last year.
- 6) The country representative says making sure that product gets to him is someone else's problem.
- 5) You give your logistics service provider a blank check.
- 4) Frame agreements are mere suggestions rather than commitments.
- 3) Only the "old hands" know how to get supplies quickly.





- 2) Your in-country supply officer doesn't know the lead time for products.
- 1) People in the organization believe that MSRP will solve all of the current problems.

UNHCR can integrate their supply chain management functions by first understanding what that entails. Integrated supply chains are characterized by the three "A"s; that is, integrated supply chains are aligned, agile, and adaptable.

An <u>aligned</u> supply chain operation creates incentives for better total performance, such as:

- A single and shared view of demand and other information
- Integrating financial flows, goods flows and information flows
- Clearly established roles and responsibilities

An <u>agile</u> supply chain operation has the ability to handle disruptions and changes smoothly through:

- Dependable partners
- Collaborative efforts

And finally, an <u>adaptable</u> supply chain operation is able to accommodate shifts in 'markets' by:

- Monitoring global developments
- Creating flexible product designs that can be used in many circumstances
- Evaluating beneficiary needs

Vicious cycle keeps UNHCR performance low



UNHCR's Accountability Framework exacerbates vicious cycle

5





Figure 5 illustrates that although UNHCR is well underway in improving its supply chain, funding is driving supply chain decisions, which is not necessarily optimal. Due to the focus on budgeting, administrative control is highest on the agenda and supply chain control is translated into administrative terms; as a result, real supply chain management is not a top management priority. The current supply chain process is broken as a result of the lack of status; this is visible in the lack of measurements, the focus on functional accountability rather than a cross-functional perspective, no emphasis on shared responsibilities, and in programs occupying the driver's seat. On top of these challenges, the broken supply chain processes are difficult to repair due to inadequate availability of qualified personnel and a constant focus on firefighting instead of closed-loop learning.

The Accountability Framework assigns responsibilities on functional basis and actually exacerbates this vicious cycle. The more that accountability is stressed, the more people focus on fixing their own issues instead of looking at the root cause of problems. A well-functioning supply chain requires a more holistic view and integration across functions as previously mentioned.

The focus on administrative control can be observed in the following:

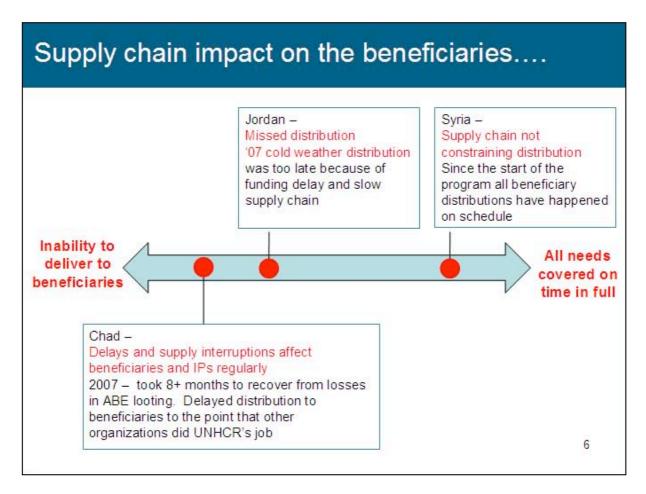
- Frame agreements fulfill audit requirements but do not make business sense. The agreements do not include price or service commitment, and in a sense the set of frame agreements is just a list of suppliers.
- Warehouses have multiple signed copies of transactions, but not a monthly snapshot of inventory.
- Not one supply officer interviewed knew the actual cost of logistics services provided by Kuehne & Nagel (including staff in Budapest).

Broken processes are visible in:

- The disconnect between field and SMS on in-bound goods, meaning that frequently, goods are stuck in transit.
- Supply planning only exists inside EPRS; Program forecasts needs while Supply places the orders.
- The result is firefighting:
- Field resources are 100% consumed with tactical activities.
- Lack of funding and the timing of funding create irrational seasonality in the operations, and the end of the budget year forces operations to place all orders by mid-November ("Christmas shopping").
- Inability to build correct infrastructure creates more work for everyone; for example, the lack of permanent warehouses in Abéché.





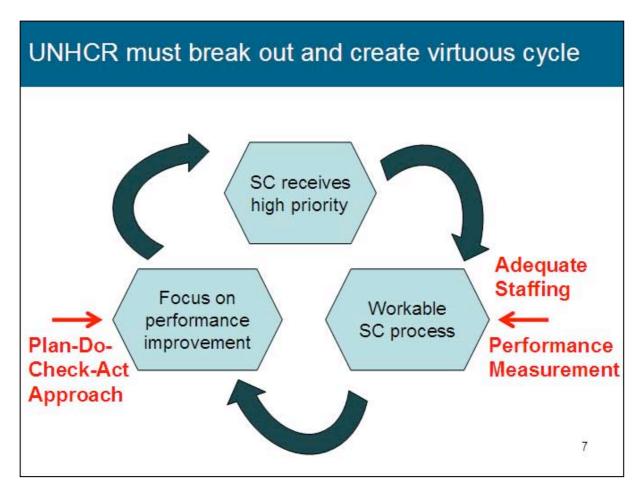


The broken supply chain affects beneficiaries in several ways. Sometimes all needs can be satisfied on time in full, such as in the case of Syria where since the start of the program all beneficiary distribution has happened according to schedule. This was not the situation in Jordan and Chad. Jordan missed a distribution in 2007 due to late availability of funding and the inability of the supply chain to still react at such a short notice. Chad had difficulty repairing the supply chain after looting in Abéché, resulting in missed distributions to the extent that other organizations actually did the job for UNHCR.

The complexity in Syria and the effort of the local staff have enabled a well functioning in-country supply chain. Jordan and Chad have a more complicated supply chain and are confronted with more staff issues, resulting in underperformance in the supply chain (see Figure 6).



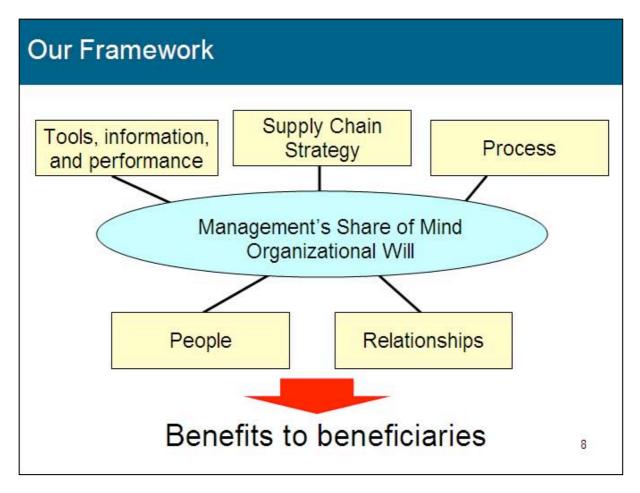




There are ways to break the vicious cycle. As depicted in Figure 7, the key is to shift to a process view instead of taking a functional perspective. Adequate staffing is necessary with clear performance measures that are created and reviewed on a regular basis so that corrective actions can be taken. In order to institutionalize lessons learned, an explicit feedback cycle is required so that improvements can be made in a sustainable manner.







Given our task of analyzing the current state of affairs for the UNHCR supply chain management function, we developed a framework to study the different aspects of the organization (see Figure 8). Through interviews and further data collection, we were able to use this framework to evaluate the status of supply chain management at UNHCR, and to identify opportunities for improvement.

We will structure our results around the concept of "Organizational Will" as well as five key elements that we identified:

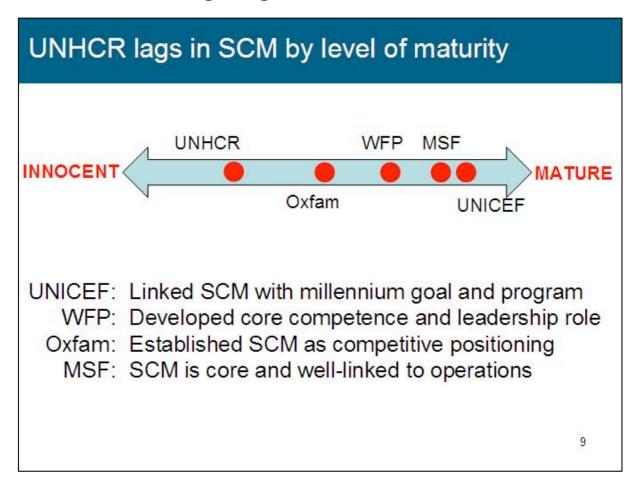
- Supply Chain Strategy
- Processes
- Tools, information, and performance
- People
- Relationships

We will discuss each of these elements and their respective impacts on supply chain operations in detail below. However, before going into our analysis of the UNHCR supply chain from the inside out, we first present a benchmarking exercise that we performed to provide an outside-in view of the UNHCR supply chain.





3. Benchmarking Insights



We compared UNHCR with four different organizations that are considered "Best in Class" in the humanitarian sector. UNICEF and WFP are frequently mentioned as effective and efficient in the field, and MSF France (further referred to as MSF) has a reputation in logistics and commitment to logistics. At the request of UNHCR, we added Oxfam to the list.

UNHCR has come quite a way in the last few years and has put considerable effort in their supply chain. However, we believe that they are the least mature of the organizations we compared (see Figure 9). Until five years ago, UNICEF was similar to UNHCR, in that supply was considered secondary. While they are still adamant about the need to fulfill their wider organizational objectives, they are able to demonstrate that supply can play a significant role. UNICEF tied supply chain management to the Millennium Development Goals (such as reducing infant mortality rate).





Benchmarks at UNICEF, WFP, MSF, Oxfam indicate what is possible

		WFP	Oxfam	MSF	UNHCR
Organizational Will	High	High	Medium	High	Low
Supply Chain Strategy	High	Medium	High	High	Low
Process	Medium	Medium	Medium	High	Medium
Tools	Medium	Medium	Low	Medium	Medium
People	High	Medium	Medium	Medium	Low
Relationships	Medium UNICEF	High WFP	Low Oxfam	Low MSF	Low UNHCR
Complexity	High	Low	Medium	High	Medium
Income	2.1B	2.7B	450M	180M	1.6B
Logistics budget	1.2B	1.7B	125M	24M	600 M
SCM personnel	700+	2,200	450+	420+	210

^{*} Financial figures are in US\$.

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The benchmark results are depicted in Figure 10. As head of the Logistics Cluster, WFP has established the leadership role and staffed accordingly. Oxfam has embarked on a three-year program to gain understanding within the organization of not only the value of supply chain but also of the basics of what supply chain is and how it impacts the rest of the organization. They feel that the sector is getting more and more competitive and that operations will become even more difficult, so they want to establish logistics and supply chain as a differentiator (especially with donors). Finally, MSF supply chain management went through their phase of gaining acceptance in early 1980s and are now well-linked with the organization's goals.

We used the aforementioned concept of organizational will and the five key elements to evaluate the relative position of each of the benchmarked organizations.

UNICEF showed that monitoring and supporting in-country distribution of high impact supplies will ensure supplies reach all the way to the children. For Oxfam, supply chain management is the core competence that cuts across programs and geography; their key is to provide support to the programs, especially in emergency response.

Oxfam is decentralized but logistics is trying to play a role in improving cost effectiveness and transparency of operations. Oxfam is closest in maturity to UNHCR but they have made a decision to implement their logistics strategy even at the expense of other programs in order to provide the tools necessary to improve their supply chain.





Finally, the core objective of WFP is to save lives in emergencies, prevent hunger, and restore lives. Logistics plays a critical role in ensuring that food and other supplies reach the people in need.

Best in Class:

Organizational Will;

Both UNICEF and WFP have shown that their management understands and values the role of logistics. Oxfam has been undergoing transformation for the last few years, and recently made the decision to invest in supply chain software to enable logistics to provide the service necessary to meet the organization's objectives.

Supply Chain strategy:

Oxfam appointed a logistics strategy owner to develop, articulate, and implement logistics strategy for the next 5 years. The management of the organization endorsed the business case to invest in supply chain systems as a critical part of the strategy necessary in order to yield millions of dollars of savings every year.

Process:

Short term planning is done at the field level. Short term stock replenishment in the central warehouse is done based on target inventory and lead times. Long term planning is done based on aggregated historical use. MSF has a very high turnover of their international staff but has designed a process to minimize disruptions caused by this intentional turnover.

Tools/ Information/ Performance:

UNICEF believes that numbers tell the story, so gathering the right data is necessary to achieve their strategy. To that end, they both establish clear targets and measure performance; this movement was a big part of their cultural transformation.

People:

UNICEF has made an investment in capacity building, re-designed the process for recruiting new supply chain employees, and is building a strong and interactive community of supply chain professionals.

Relationship:

WFP gained recognition as the organization capable of taking the logistics lead for the sector by establishing the scale and depth necessary to coordinate the sector.

Further, we compared the organizations in terms of their operation, size, logistics budget (including procurement and transportation/warehousing costs), and the number of supply chain staff (including those at headquarters, in the field, national staff and international staff). UNHCR is one of the bigger organizations but does not have a comparable staff size. The scores on the six key elements have been developed together with SMS and reveal that UNHCR is scoring equally or lower than the lowest of the group.

Key Insights:

All organizations interviewed mentioned senior management support as the number one key success factor to transforming their organization. Transformation came





about as a result of articulating the vision for supply chain management and by showing their impact on programs and on the organization's mission. Quantitative measurement and results are much more effective than anecdotal evidence in paving the way for process improvement. Communication is critical where all involved parties need to be updated on a regular basis.

Common Challenges:

The development and retention of qualified staff has been and will continue to be a major issue for all organizations benchmarked. Finding appropriate technology for supply chain management and acquiring the ability to get viable data is an issue that is also a major challenge for all organizations studied. Defining appropriate and feasible metrics, supplemented with gut instinct or prior experience, is necessary to know where you are and where and how you are going to improve. Most organizations are weak on planning and are struggling to move from a functional perspective to a process view.

4. Assessment Results and Recommendations

4.1. Organizational Will



A broad view of supply chain beyond SMS is currently lacking at UNHCR. Supply chain management is not considered to be a core function, and suffers from years of





under-investment in people, tools, and management direction. At the global level, most people do not understand exactly what "supply chain management" entails and use it as a synonym for SMS. UNHCR has a strong focus on functions, auditing, and individual accountability – not the timely and efficient delivery of services to beneficiaries. At an operational level there is a lack of understanding of supply chain trade-offs, which fuels bad decision-making at the field level. Programs have a hard time prioritizing and accepting the high cost of operations in some places.

With regard to organizational will, we suggest the next steps for 2009 and beyond in Figure 12 below.

Next Steps – Commit to supply chain improvement

Short term - 2009...

- Senior management needs to commit to resolving supply chain process barriers (silos, HR policy, funding obstacles)
- 2. Raise supply chain to the division level to facilitate cooperation in cross-functional development
- Create a true supply chain organization – SMS++ (supply, warehousing, fleet, asset, inventory management, transportation management)
- 4. Name person responsible for supply chain strategy

and beyond

- 1. Be consistent will take years to turn the organization. Ongoing support is critical
- Provide sufficient and strategic funding
- 3. Help promote paradigm shift with constant and consistent communication from the highest level

12

The key to transforming the supply chain is to show commitment to change from the top. Although the creation of SMS has fueled supply chain thinking in UNHCR, several studies conducted over the last few years have identified further opportunities and the need to actively support the development of supply chain management. These studies have produced limited results. To achieve the full potential of an optimized supply chain, supply chain management should be raised to the division level in order to give it the status and the clout that it requires within the organization to be effective. SMS today is not a true supply chain organization, and is missing critical pieces of the puzzle such as inventory ownership and transportation management. As a start, it is essential to give someone responsibility for the development of supply chain strategy and its execution.

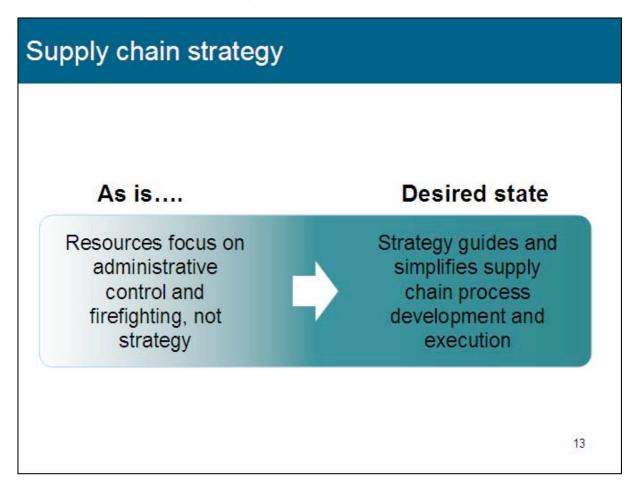
The long-term view must be consistent and sustainable. First, provide the necessary funds to supply chain operations, and be patient with the understanding that some results will require commitment beyond a year. For other organizations





that we benchmarked, the infusion of funds was the most important step in the organizations' transformation.

4.2. Supply Chain Strategy



The focus of UNHCR supply chain resources is on administrative control and firefighting – not on strategy – as is visible in several aspects:

- Performance is not measured.
- Supply chain strategy does not leverage across countries; rather, it differs by country and individual staff members.
- Strategy is undeveloped in critical areas such as planning, sourcing, outsourcing, supply chain integration, performance measurement, etc.
- Staff are unable to articulate vision on how the supply chain spans across functions, and there is little notion of integrated supply chain.
- Chapter 8 does not articulate supply chain strategy for UNHCR.





Next Steps – Develop a supply chain strategy

Short term - 2009...

- Name an owner for SC strategy and assign "skilled" resources to team for developing and implementing strategy
- Develop and start implementing supply chain strategy for one important commodity (one of the shelter commodities)
- Document current strategy to the extent it exists (framework could leveraged from out strategy document)

and beyond

- Identify and quantify strategic opportunities that leverage across countries and that strengthen coordination and alignment across functions and with partners
- Develop strategy in areas that are not addressed
- Formalize and share the strategy with UNHCR and its partners
- Create a culture that values strategic review and improvement
- Enlist country representatives and programs as co-owners of strategy for their region
- Implement strategic change and measure success to drive further action
- Develop performance measures so that UNHCR can know that the strategy is working

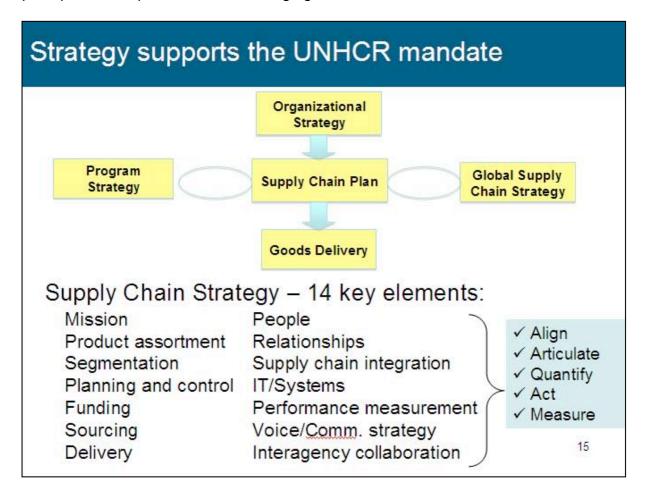
14

For 2009 and beyond, the actions to take are summarized in Figure 14. It is essential to appoint an owner of the supply chain strategy and select one or two products as a prototype in building a strategy. As UNHCR is the cluster lead for emergency shelter, one of these produces should be an emergency shelter item. Such a selection would lead to high exposure and significant impact on other organizations.





A well-articulated strategy needs to be developed that adheres to 14 guiding principles, as depicted in the following figure:

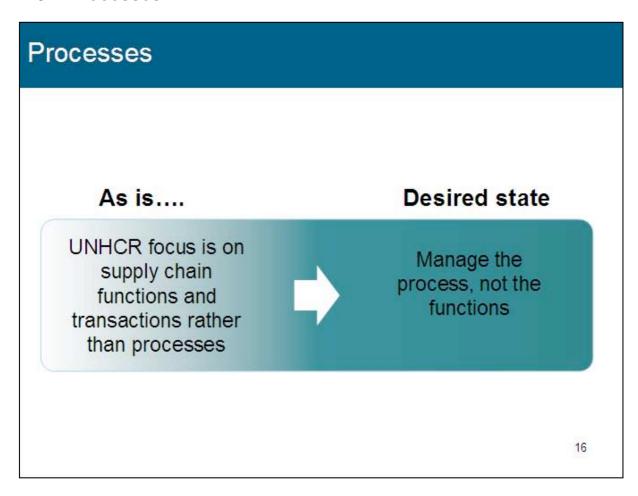


In Figure 15, we see that goods delivery is an outcome of a logical supply chain plan stemming from the organizational strategy which in turn defines how supply chain supports the UNHCR mandate. The program strategy interprets the mandate for the local population and defines the UNHCR response to their needs. In essence, it answers the who, what, when, and how questions. Global supply chain strategy is essentially the architecture of the supply chain infrastructures (network design, transportation modes). All these come together to define the supply chain plan in terms of cost, speed, and quality of delivering goods to beneficiaries.





4.3. Processes



UNHCR supply chain responsibility is divided over several departments. At this moment, there is no one who has a full overview of the supply chain, nor does anyone have responsibility for the process from beneficiary needs to supply (with the exception of emergency situations). Issues need to either be resolved within the hierarchy or go across multiple platforms for resolution. This leads to excessive lead times for decision making and because of the strong audit focus, two approvals for purchase orders are required, one within the program and one within SMS. Currently, supply chain activities are mainly transaction-driven, and there are no plans guiding the strategic element. For example, there is no stockpile strategy which defines key terms such as when to replenish and for what quantities. Explicit targets for stock levels do not exist though many experienced people have a figure in mind. Process standards are lacking and most activities lack both a plan and an evaluation of the process performance.

UNHCR needs to develop a set of core supply chain processes with clear ownership and authority. We have understood that demand is relatively predictable on an aggregate level, which makes it possible to set up a somewhat accurate set of plans. Performance targets need to be set for these processes such as order-to-delivery lead times for to-country distribution. The frequent measurement of these targets is an explicit requirement to establish the closed-loop improvement cycles





(plan-do-check-act) that UNHCR needs to implement for a more mature supply chain.

More specifically, we encountered the following issues:

- No transparent supply chain process standards to measure success (only for purchasing); and varies by country and individual.
- Administrative focus with multiple approvals (program, purchasing) and a myriad of rules and procedures.
- Data are not maintained well (for example, due date information is not currently available; however, this does have priority and will be implemented from January 2009 onwards).
- "Christmas shopping" effect to use budget by the end of the year.
- Functional focus instead of end-to-end focus (including functional KPI measurement), which reinforces a "blame-game").
- No "Plan-Do-Check-Act" cycle; strong focus on "Do."
- · Disconnected planning processes and lack of long-term view.

In the short run, further population of MSRP with critical data such as warehouse and inventory information needs to continue. Training needs to be conducted in the proper use of MSRP and the type of information needed as well as in the method to in-put A cross-functional business process improvement team needs to be created to begin outlining key processes and should also provide input for the development of supply chain key performance indicators. This can be done by choosing two important products and following the order-to-delivery flow to capture all order-related supply chain decisions made from field to headquarters and back. Using a standardized process flow chart technique, a process owner should be named and be held responsible for the process description and (re)design. Currently, the management of inventory levels is not in the scope of supply chain management at UNHCR but many humanitarian organizations have explicitly incorporated this function into their supply chain span of control.

The UNHCR supply chain needs to be converted into a more planning-driven supply chain by developing goods flow plans that link budgets with the movement and storage of goods. These plans need to extend over multiple years to support longer term planning in countries but also to support the development of supply chain strategy. The long-term plans should be linked to a rolling short term plan incorporating the essential elements of "Plan-Do-Check-Act" cycle; plans provide direction for the "do," and performance indicators ("check") provide directions for the improvements and changes ("act").





Next Steps – from silo management to process management

Short term - 2009...

- Set up cross-disciplinary business process improvement team using Plan-Do-Check-Act
- Continue populating MSRP to support process improvement (warehousing and delivery information)
- Take 2 relevant products, describe key processes according to a standardized process flow description technique and appoint process owners
- Develop supply chain standards; not textbooks but guiding principles

and beyond

- Develop process oriented targets that cover the order to delivery process instead of just functional areas
- Define accountability based on process ownership and performance
- 3. Include inventory ownership in SCM scope
- Focus on actively and frequently providing status reports in graphical format; do not rely on others pulling information from MSRP
- Develop and implement planning processes focused on managing goods flows, not just budgets
- Use rolling plans based on beneficiary needs rather than based on funding availability; this avoids end-of-year 'Christmas shopping' to deplete budget
- Relate beneficiary focused end-to-end KPIs to strategy, and develop agreed definitions of SMART indicators

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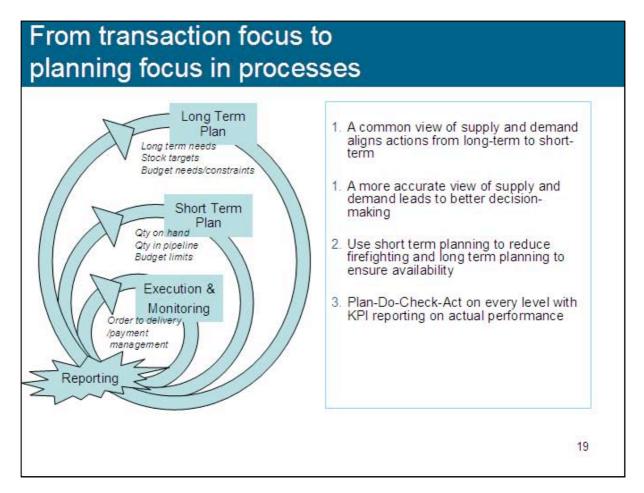
Figure 17 indicates steps to take in 2009 and beyond.

Essentially, there are two types of processes in a supply chain:

- Event-driven processes are related to either emergencies or to an order raised by the field to fulfill the needs in a camp. These are basically characterized by a 'hitand-run' focus because of the immediate need at the beneficiary level.
- Forecasts drive the stocking of items and drive the upstream supply chain that is not emergency-related. These processes are more an enabler for the processes facing beneficiaries, and can be performed more slowly with more focus on efficiency and therefore are more about 'being prepared'.







Processes require planning in order to close the "Plan-Do-Check-Act" loop. Currently, activities are strongly transaction-driven and consist of a layer in time and aggregation. A common view of supply and demand aligns actions from long-term to short-term; for example, country distribution plans provide information for global inventory management plans and long-term plans provide input to short-term plans. The long-term plans could provide visibility for 1-5 years on an aggregated level in terms of expected beneficiary needs, required supply, and required stocking.

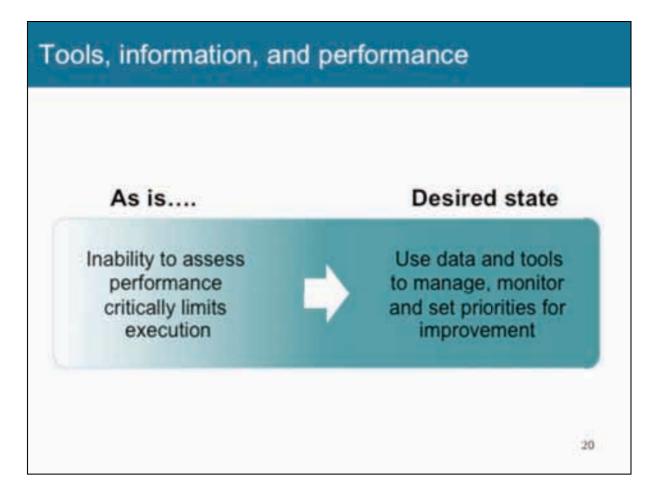
The short-term plans specify the requirements on an item-by-item basis by detailing what is required, what is available and what is needed for stock replenishment. The execution layer puts the plan into action. Through short-term planning, firefighting is reduced; long-term planning ensures within-year and multi-year availability of resources and facilitates multi-year planning of country operations. "Plan-Do-Check-Act" exists on every level, and KPI reporting on performance is used to adjust plans, take actions at the execution level, and feed into improvement plans.

The above figure summarizes these concepts graphically.





4.4. Tools, Information, and Performance



In the areas of tools, information and performance, MSRP has been put forward as the vehicle for change. Purchase order management in MSRP has been successfully implemented in many countries but the key enabler for countries to manage supply chains better, an accurate track and trace function, is currently lacking in MSRP. Furthermore, forward-looking demand information is unavailable and there are no attempts to create a demand forecast for planning purposes. Historical information is hardly available in MSRP as Appendix V demonstrates, and what does exist is not evaluated structurally and is not consistent. We analyzed order-to-delivery data for 6 commodities and found that the data available in the field sometimes differ considerably from MSRP data due to issues in data management & maintenance (see Appendix V).

Often, UNHCR relies on others to provide the data (for example, UNHCR was unable to provide August 2007 data on warehouse stocks but the data was available through their local partners). There is little information sharing with logistics partners and, as a result, there is a strong reliance on anecdotal data, which leads to sweeping misperceptions.

MSRP data integrity is a critical issue that UNHCR should address at the highest priority. An analysis of six common commodities revealed massive differences between the field-produced data and the system data. This is not





uncommon in the early phases of software implementation but must be overcome quickly. In addition, reporting tools such as pipeline with accurate delivery information, stock management, and demand supply matching must be developed to help the field work more efficiently. Today the field is still working with spreadsheets and their efforts to load information into MSRP are un-rewarded because the limited reports do not help them manage their supply chains better. Appendix I provides more detail on this analysis.

Additionally, all documentation such as the MSRP manual, Chapter 8, for key supply tools should be translated into French as soon as possible. See Figure 21 below for more information.

Next steps – tools, information & performance Short term - 2009... and beyond 1. Continue with MSRP development and Work on data integrity for MSRP. rollout (data availability and maintenance in MSRP, adequate use of MSRP) Create team with programs to focus on 2. Use MSRP fully to create pipeline addressing field needs; implement track and trace view and track and trace capability as well as necessary reporting Benchmark and educate the organization to bring in best practices Implement electronic "pull" interface with KN ASAP related to use of information, planning and performance measurement 4. Use MSRP to share planning Require quantitative data and analysis information rather than anecdotal evidence. All tools should be bi-lingual in. English and French Reward and recognize sharing of information and improvement Develop a supply chain KPI-framework that combines a bottom-up effort with a top-down strategy driven view Develop capabilities to incorporate IP-s and logistics partners in MSRP and to report on their performance 21

The Accountability Framework that is currently under construction focuses on providing detailed function-oriented information and particularly on the procurement function. Although partners are also involved in procurement functions, partner performance is available only upon request (for example, through the Kuehne & Nagel website where orders can be tracked) or not at all and is the case with most implementing partners. Although the endeavor to collect performance information is good, it is currently driven by data availability and not by a strategic vision. Furthermore, the Accountability Framework, as the name suggests, focuses on providing metrics by functions and describes how well the function is performing. These metrics lack an overall supply-chain-oriented framework where the relationships with actual beneficiary needs become clear. For example, why should





the percentage of orders that use a framework agreement be a supply chain performance indicator? Situations may call for emergency spot market buying and, if it is desirable to spread the risks, a diversified approach using long-term commitments, spot market purchasing, and other contracting forms are more suitable. Therefore, the information provided is not actionable.

UNHCR should first focus on developing a dashboard of supply chain performance that provides information on the actual status and health of the supply chain. This information would be useful for planning and controlling purposes - not for assigning accountability for the function. By means of such a dashboard, it is relatively easy to see how the supply chain is performing and whether it is meeting expectations and if not, where the supply chain is out of control. It is essential to include the performance of internal UNHCR supply chain processes but also of the suppliers, logistics partners, and implementing partners – especially those that keep inventory for UNHCR. These indicators should also have improvement targets built in and show the current state of affairs and how it is poised to meet improvement goals. Today, none of the indicators in the Accountability Framework that are being developed focuses on improvements. A combination of current state of affair indicators (defensive indicators) and indicators that describe improvement opportunities such as the reduction in the order-to-delivery lead time from suppliers to country warehouses, or the increase in the number of countries filling in MSRP correctly, (offensive indicators) will provide the complete picture necessary to manage the supply chain.

A potential dashboard of KPIs is provided in the following figure; a more elaborate version can be found in Appendix IV.

Example of a dashboard of key supply chain performance indicators

Performance subject	Indicators	Target	Actual
Service level	- % distribution on time - # distributions/year		
Supply chain lead-time	 MSR order to delivery lead-time PO order-to-delivery lead-time % decrease customs lead-time 		
Inventory health	- % of stock that has moved >1 year ago - % of stock value < 1 month old		
Quality	 % of goods damaged in transit % of supply chain management people in place according to job profile 		
Cost of supply chain	-\$-expense per mode of transport per period - % reduction in air transport - Inventory level in days of supply		

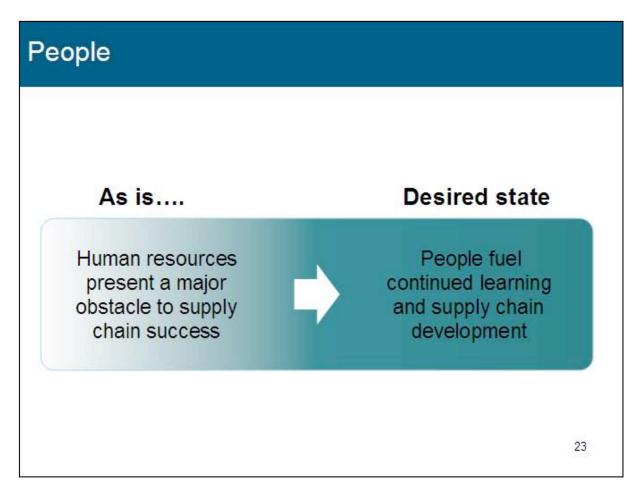
22





Several of the indicators discussed in Figure 22 may already be present in the Accountability Framework. However, a top-down and process-oriented view known as a dashboard is necessary to provide a more manageable set of measurements that relates to actual supply chain performance. Measuring is not a separate standalone activity but should be done as an integral part of every supply chain process.

4.5. People



Currently, staffing and recruitment at UNHCR are driven by policy to the detriment of operations. The lack of a defined career path within the supply chain function has eroded the long-standing base of strong supply officers for which UNHCR used to be known, resulting in inexperienced and untrained staff or the necessity to resort to external solutions such as UN volunteers or seconded staff. High turnover, a lack of training, and weak processes mean that consistent supply chain performance is impossible. In addition, this leads to a lack of continuity and loss of institutional knowledge. Inconsistent field organization and presence of inexperienced supply officers means that everyone is involved in supply chain and no one is held accountable for supply chain performance.





Next Steps – Investment in training, career management, and HR discipline are necessary

Short term - 2009...

- Define the skills necessary to become supply officer
- Incorporate competence model into job descriptions to identify skills needed to excel
- Ensure basic training for all staff (processes, tools, SMS orientation, etc.)
- Increase entry-level position for supply officer as part of career ladder

and beyond

- Change HR policy to choose candidates based on needs and skills (including external hiring)
- Develop discipline in HR management to provide strong performance feedback and coaching to improve skills
- Create a community of supply chain professionals
- Develop supply chain career path

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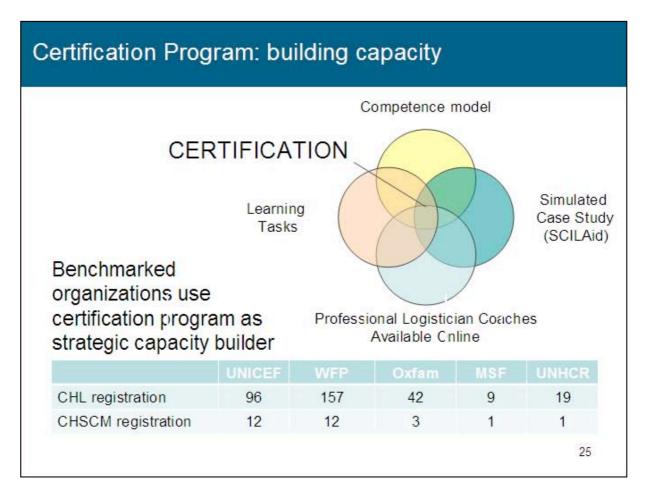
It is important to make a long-term investment in people in order to increase the capability and diversity of the skills of the team. Building a strong and interactive community of supply professionals will enable sharing of knowledge, development of skills, and inspiration boosting the morale of the employees. Setting up a core of confident and capable supply staff will lead to innovative thinking and will create an environment where people are willing to take risks, come up with new ideas, generate solutions, and share these ideas with others.

Today, poorly performing logistics professionals remain in the ranks of UNHCR until their contracts expire; if long-term contracts become the norm, performance management becomes even more critical. Evaluations come at end of mission which is too late for meaningful feedback, and the lack of clarity concerning performance expectations and metrics makes evaluation difficult to manage. A potential solution would be to clarify specific objectives and performance expectations at the time of hiring and to then institute a formal evaluation and review process involving program leaders and a designated SMS leader at regular intervals before and at the end of mission. A formal mentoring and coaching support would benefit less-experienced supply personnel.

One way to address the gap in specific skills in the supply organization is to review and incorporate the competence model necessary for supply officers to succeed in their position both at SMS and in the field (see Figure 25).







The Certification Program brings recognition to the importance of logistics in the provision of aid (in the form of food, as well as non-food items such as medication, medical equipment, etc.) in both man-made and natural disasters, as well as in the implementation of other disaster management operations. One key objective of the certification process is to build supply chain capacity. Through access to training in logistics and supply chain management, local staff become more effective and empowered in the process. Utilizing a modular approach to training, increased proficiency and better institutional memory can be achieved in the field, as well as in headquarters of relief organizations.

Competence Model

The competence model sets the scope and boundary for the qualification answering the question "What do you want them to be able to do?" The competence model sets the foundation for the learning material development and therefore it is important to ensure that the model presents the expected outcomes of performance.

The Certification in Humanitarian Logistics is a competence-based qualification and requires candidates to demonstrate their ability to achieve the required outcomes of effective performance in a humanitarian supply chain environment, and their knowledge and understanding of humanitarian supply chain management. This unique model combines three key elements to create a comprehensive learning environment: learning materials, interactive coaches, and a real-life scenario case study. The case study provides the context of the learning





system environment and is created to give the candidates a working environment to complete the tasks to demonstrate their competence. Assessing candidates based on the competence model also allows them to draw upon their previous experience to complete the units successfully.

In this model, competence is assessed rather than existing knowledge. For competence assessment, the coach is trying to determine not just how much a candidate knows, but if they understand it sufficiently to apply it in real life. Evidence in the form of tasks is assessed against the standards set for each unit.

Key Elements of the Competence Model

Outcomes of effective performance are descriptions of what the successful candidate should be able to do. The assessment plan for each candidate must provide for all of these outcomes to be achieved, regardless of how assessment is undertaken. Each of the outcomes of effective performance is underpinned by one or more items of knowledge and understanding. The evidence presented to satisfy the outcomes of successful performance must also demonstrate the relevant knowledge and understanding.

Each module of the Certification Program is designed to:

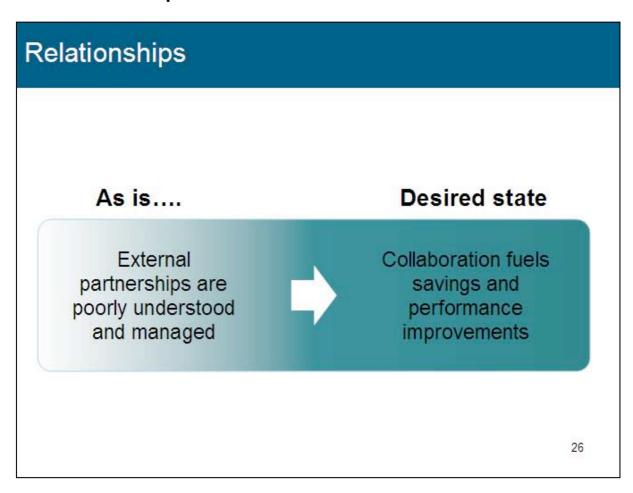
- · Make use of real-world environments to employ relevant learning context
- Focus on realistic approaches to solving real-world problems
- Position the instructor as a coach/strategy analyzer used to solve the problems
- Emphasize conceptual interrelatedness and multiple representations and perspectives
- Ensure that trainee is consistently evaluated, in order to help him/her achieve certification
- Embed learning in a rich authentic problem-solving environment(s)
- Provide authentic versus academic contexts for learning
- · Provide tools for the learner to control the learning
- Use errors as a mechanism to provide feedback on learners' understanding

The Certification Program was created with the help of a ten-member Advisory Committee comprised of seasoned logistics professionals, academics, as well as business executives, all with significant training/certification program expertise. Among the participating organizations were Erasmus University, Oxfam UK, Médecins Sans Frontières, Dow Inc., ICRC, IRC, Save the Children, WFP, UNHCR, and UNICEF. This Advisory Committee developed the framework for the Certification in Humanitarian Logistics Program and contributed significantly to the development of the first course, launched in September 2006. A UNHCR supply officer participated in the design, development and piloting of this program for three years. Many of the organizations on the Advisory Committee have incorporated the Certification Program into their capacity-building strategy and have committed to fund a set number of students each year.





4.6. Relationships



Supply chain management is a process, and its performance is impacted by the behavior and performance of many different organizations and people. Working together and developing relationships is important because the process of supply chain involves the flow of information and the flow of goods between suppliers and beneficiaries. Managing these relationships can influence UNHCR in positive ways, by:

- Providing greater/quicker responsiveness
- Sharing capacity and resources
- · Increasing access to skills and resources
- Managing complex operations,
- · Avoiding duplication of activities
- · Gaining access to supply networks
- Reducing costs

"External relationship" is a broad term, which we apply loosely to vendors, implementing partners and other UN agencies.

At UNHCR, vendor management is weak because all aspects of performance, quality, time, price, and the ease of doing business are not reviewed objectively or on a regular basis. By failing to manage this process better, there are many missed opportunities for the organization.





Implementing partners were recently given the right to procure goods. This right comes with a responsibility to assure that the procurement complies with UNHCR standards. This transition happened with little apparent training and preparation of these partners and with no means to systemically view their activities. Responsibility for training and oversight falls on SMS.

Interagency relationships vary between UNHCR's role as a participant (Logistics cluster) and as a leader (Protection, Emergency Shelter, and NFI). In both roles, with respect solely to supply chain aspects, UNHCR is perceived as weak. At the Logistics cluster UNHCR has failed to live up to its commitments in terms of resources and the cluster is dominated by its leader, WFP. In emergency shelter, failure to consistently deliver emergency shelter items has resulted in missed opportunities to take on responsibility.

Next Steps – Manage partnerships to assure quality and efficiency of product and deliveries

Short term - 2009...

- Develop active vendor management process as part of ongoing effort to separate strategic and tactical procurement
- Specific to K+N designate person in SMS responsible for relationship
- Actively manage IP (logistics partner) relationships (e.g. GTZ)
- Clusters take advantage of shared facilities and services (common services); at the field level, participate and share information (vendor performance)

and beyond

- Perform annual vendor reviews with top 20 service and product providers with clear standards
- Clusters determine and manage pros and cons of active participation in Clusters (Logistics, NFI, Emergency Shelter) and fund appropriately.
- Work with K+N as a strategic partner and take advantage of all services
- Clarify IP strategy and define collaboration and role

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Pursuing collaboration with partners will extend UNHCR's organizational reach, increase capacity, and ensure that common goals are achieved. UNHCR can benefit from implementing a more formal and proactive supplier/vendor management approach with all suppliers of major critical materials, assets, and services.

Kuehne & Nagel in particular represents a prime opportunity for UNHCR to manage and forge a stronger partnership. The global contract which has existed for 15 years will be up for renewal in December 2010. It appears that there are many provisions in the contract that are not fully utilized by the organization. The need for interfacing with Kuehne & Nagel's system for setting up automatic feed of pipeline information has already been demonstrated. UNICEF, which has the same firewall restriction, has found a solution by allowing the field offices to pull the track-and-





trace data into their system rather than having Kuehne & Nagel push the information. Kuehne & Nagel can act as 3PL and control and monitor other suppliers to ensure that they are in compliance with UNHCR requirements as well as provide specific logistics training. Using 3PL might also enable UNHCR to use total cost of ownership analysis for all major purchases, considering cost and complexity of the full supply chain to ensure best value. A good example is to take advantage of Kuehne & Nagel's equipment detention arrangement with major ocean carriers in considering the total landed cost of goods. A quarterly review of Kuehne & Nagel's KPI would provide ample opportunity to see whether UNHCR can take advantage of Kuehne & Nagel's offerings. If many of the services which are included in the contract do not provide any benefit to HCR, then the contract should be revised during the annual review.

The competing roles of the logistics cluster and UNJLC seems to be coming to an end since a merger is in plan. However, since the merger is still at a design stage, UNHCR should play an active role in defining the rules of engagement for the cluster. UNHCR needs to participate in the evolving logistics cluster to defend and assure the clusters responsiveness to the needs of UNHCR's beneficiaries (access to capacity in emergencies, development of infrastructure and tools to support mainstream operations, etc). Finally, we would like to comment that there is an additional risk regarding UNHCRs limited participation in the logistics cluster. If WFP were to unilaterally raise funds based on the cluster it could limit UNHCR's access to these limited resources. The logistics cluster needs to be developed as a platform for delivery that supports the operations of all the UN agencies and relevant NGOs.

In addition, there is a strategic opportunity for UNHCR to take a stronger leadership role, specifically in the supply chain management of the shelter cluster. As more and more organizations begin to examine their core competence and focus on their essential elements, more opportunities will arise in specializing in key areas. UNICEF, for example, would welcome the opportunity to outsource the management of shelter items to UNHCR so that they can focus on their essential commodities. UNHCR must first demonstrate that they have the capability to be entrusted with such a task.

Implementing partners (IP) fall into two categories – those NGO's like Save the Children who receive funds from UNHCR (amongst other sources) to provide protection services and secondly service providers like GTZ. The introduction of IP procurement in recent years presents a huge challenge in terms of ensuring compliance with procurement rules. Streamlined tools and communication paths need to be developed to assure that IP's understand their responsibilities, have access to supply experts to answer their questions, and can report back the minimum information necessary to feel confident in their activities.

The GTZ relationship is unusual. As an IP that is essentially a logistics service provider GTZ plays a critical role in the functioning of the supply chain. GTZ is unable to provide quality services in Chad because the resources they have (primarily financial) are inadequate with respect to their responsibilities. Responsibility for this relationship is split between the field (operational relations and annual country level budgeting) and the HQ (contracting and budget details). The operational relationship in Chad is broken today and the field and HQ together need to deal with the problem.





5. Conclusion

Summary Desired state Gain Supply chain management gets Organizational Will seat at commissioner's table Improved: Well articulated supply chain Supply Chain Strategy strategy Beneficiary services Process oriented and planning Efficiency / effectiveness Process driven supply chain · Availability of goods Tools. Right information is available Fundraising potential information & throughout the organization performance Credibility Qualified and skilled supply Competitive position chain professionals throughout People Morale in organization UNHCR Collaboration fuels savings & Relationships performance improvements 28

We have proposed several short-term fixes as well as a longer and broader set of actions for dealing with the creation of the Integrated Supply Chain Management at UNHCR. Of particular urgency is the need to address the Human Resources structure and policy. The recruitment and retention of qualified and skilled supply chain professionals throughout UNHCR should be high on the agenda.

Though the exact findings can not be quantified in terms of gains, we are convinced that the proposed changes will first and foremost lead to an increase in the extent to which beneficiary needs are met due to improvements in efficiency and delivery of goods and services. As a result, more beneficiaries needs will be met which will increase UNHCR's credibility with partners as well as donors. This will facilitate fundraising and increase the competitive position – there are others who are positioned to enter into areas which have been traditionally the stronghold of UNHCR. Last but not least in importance is the improvement in morale which will contribute to the image of UNHCR as a great place to work and thereby attract talented people.





6. The Opportunities

Top 5 strategic opportunities

- Create a world-class supply chain for emergency shelter that can be used by all cluster agencies
- Adapt best practices from ER supply chain to the mainstream supply chain, starting with one or two important mainstream commodities
- Improve competence level and retention of field logisticians through better recruitment and training
- Use PDCA to improve supplier-to-camp delivery process using a cross-functional and a cross-partner team
- Meet with the High Commissioner quarterly to discuss supply chain performance using 5-7 Key Performance Indicators

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We have identified five major opportunities that should help UNHCR to achieve the desired state as summarized in Figure 29.

First of all, we recommend that UNHCR leverage its emergency response capabilities by creating a world-class supply chain for emergency shelter. This service could be made available to other agencies in the cluster. A process chart should be developed mapping the flow of goods from the moment that an emergency is declared to the delivery of goods to the end distribution point.

Steps for defining emergency response supply chain:

- Create a flow chart with activities and decisions required to deliver emergency items.
- Collect data on lead-times, procurement rules, sourcing data.
- Develop supply chain strategy that addresses the 14 aspects discussed in this report.
- Analyze and determine inventory strategy; where to store emergency shelter products, what quantities as well as rules for rotating the inventory, etc.

Secondly, we suggest transferring best practice processes from emergency supply chain management to mainstream supply chain.

Third, recruitment and training of supply officers should be given a high priority to ensure that the competence level of the people responsible for managing





the supply chain is improved. The current human resource policies have resulted in the field offices being understaffed and under-served. UNHCR should take advantage of standard training programs that are available to the organization.

Fourth, an improvement cycle using the concept of plan-do-check-act (PDCA) approach needs to be applied to the supplier-to-camp delivery for multiple teams involved in this process. Relevant key performance indicators must be defined and plans need to be made for managing inventory and supply using stock targets, and demand forecasts.

And finally, a dashboard must be created focusing on 5-7 key performance indicators of supply chain performance. This dashboard should be a list of a critical few indicators and focused on measuring the health of the UNHCR supply chain. A quarterly meeting should be held with the High Commissioner to review the supply chain dashboard.

UNHCR has made progress over the last few years in re-aligning their supply chain priorities. Investment in SMS has produced significant cost savings, allowing them to increase the number of staff; and commitment was made to further develop and implement MSRP as a supply chain tool. Today, the entire sector is undergoing change where organizations are assessing their strategic objectives, donors are shifting their priorities, and inter-agency collaborative initiatives are maturing and undergoing reform. Now is the time for UNHCR to clearly define and articulate the supply chain strategy that will continue to support the organization's mandate to protect, assist, and provide durable solutions to the people in need.





7. Appendix I – Case Study: Chad

Chad – Supply Chain Assessment Visit Sept 27 – Oct 4, 2008 Fritz Institute

Summary:

In August 2008 UNHCR asked the Fritz Institute to conduct an analysis of its supply chain. From the start, the Deputy High Commissioner asked Fritz to focus on the "integrated" supply chain and the issue of accountability for supply chain performance. To this end, the Fritz team has spent one week each in Geneva and Budapest and conducted field visits in Syria, Jordan, and Chad.

The objective of the field visits was to observe the structure of the organization and supply chain processes, hear from the field what is working or not working, and objectively assess the functioning of the integrated supply chain.

Context:

Chad is amongst the largest HCR operations with a total annual budget of \$70 million. Activities are structured to support 430,000 displaced people (refugee+ IDP) in the east and 50,000 in the south. These operations started in 2004 with movements from Central African Republic and Sudan into Chad. In 2006, internal displacement became a more significant problem in the east with a concomitant increase in security problems in this area.

Chad is a difficult place to work. Logistics in Chad is complicated by distance (landlocked country), lack of infrastructure, and insecurity. These factors put additional strain on UNHCR's already weak supply chain resources. From an HR perspective it is difficult to find staff that are willing to work in Chad because of security, living standards and the need for French.

In addition to funding and supplying programs with NFI items, HCR has an enormous operation supporting the infrastructure of its partner organizations. Fuel provision is a massive program, more than 3.5 million liters of fuel are managed in country. In addition, fleet management is huge with 400+ vehicles serviced by HCR. In addition, HCR aspires to provide transportation support to non-HCR products in the east, which is an important part of the total truck utilization in the country.

Observations:

Note: the framework below reflects the overarching structure for the key messages for HCR. Not necessarily the most important things for Chad specifically.





	Chad		
Context	Chad is hard – more operational challenges than most countries		
Scale Country infrastructure Security	 Large operation \$70 million Infrastructure is virtually non-existent - landlocked country requires 1000+km for access from nearest port, long distances, non-existent roads, rainy season blockages Security limits access, causes losses (theft) Political context is difficult - process changes affecting logistics are frequent (i.e. new requirements to register vehicles with police) 		
Organizational Will	Chad field teams understands logistics constraints and importance but feels powerless to properly fund the necessary investments		
Vision and commitment Culture Getting past 'audit'	 Senior management is more involved in SC problems than they would like to be but no one is committed to improving the strategy and solving the systemic problems Audit is a pervasive driver for the bulk of supply chain activity. In warehouse and transportation - every warehouse movement is documented and filed but no one knows how many tons of cargo they shipped last month 		
Supply Chain Strategy	The basic supply chain strategy exists but the team doesn't have the resources to pursue alternative strategies to solve problems.		
SC place at the table Value creation Leveraging across programs Pro-active action Cross functional integration	 Supply reports to the Rep in NDJ and the senior Program Officer in ABE and everyone in country recognize the impact of logistics (good and bad). Without funding for infrastructure the supply team is powerless to make any dramatic improvements All supply staff is consumed with transactional / day-to-day activities. There is little room or tools for strategic reflection and improvement Cross-functional work is not bad. The closer you get to the field, the better the collaboration, but supply is not viewed as an equal partner at the table. In ABE this is because the staff is mostly inexperienced and all junior. In NDJ the major obstacle is the transition from the period with Collins as Senior Supply Officer to Aman finding his place and learning more about HCR operations. 		
Process	Local processes are improving with better pipeline and warehouse visibilit (locally done) but processes breakdown outside of local control		
Focus on key business processes Modern process management Collaborative improvement	 Field is committed to getting things done for the beneficiaries but it is done through flexibility and creativity not planning and process. Supply chain is too long to effectively support operations. Customs clearance and in-bound transportation blockages on Douala corridor have been massive. Inability to resolve problems quickly is a result of split ownership, lack of resources during peak (no P4 in NDJ), and lack of flexible resources at HQ (during 07) Systematic follow up of orders is mixed. Chad had the best pipeline report we saw and was invested in following up on expected deliveries, but there are still multiple examples of lost orders (e.g. spare parts order with Goran's name on it sat at the airport for 6 months). Program and supply do work well together to solve immediate problems but they are unable (together or alone) to eliminate important constraints (e.g. truck capacity/availability) Planning process is virtually non-existent. 2006-07 limited supply and big demand. 2008 big supply and limited demand. Supply lead time is so long that traditional planning is impossible. In ABE one supply officer has pushed NFI inventory to warehouses based on population statistics rather than distribution plans. Not bad but hardly ideal. Asset management process (LAMB) has been unable to succeed in writing off goods (huge backlog of cars and trucks to write-off 50+) because requirements are onerous and unreasonable. 		





Tools	MSRP underutilized and not yet useful to the supply team in the field.
Technology Dashboard / KPIs	 MSRP - PO's and Reqs in the system. Team is quite positive about MSRP as a future tool. Inventory information is not available and the field is intimidated by their understanding that all PO's since 04 need to be received in the system. Only one report is used regularly by supply (pipeline report) which they use as a framework to update the ETA information with reports from Saga and information from KN website. Implementation of tools is inhibited by communication problems – field currently understands that it must receive 4 years of PO's to start using the warehousing module. No summary level reporting exists (transportation volume, fuel distributed, etc) No dashboard or KPIs but supply in ABE is inventing tools to evaluate health of inventory and stocking targets. Again – these are not bad solutions, but its energy consumed in the absence of proper MSRP reporting and standardized tools inside the operation. Would like to see manuals and Chapter 8 in French Some flexibility in MSRP where items can be created locally
People	Field team lacks the combination of supply and HCR experience to re-enforce weak processes, they need training and support.
Recruitment and staffing Motivation empowerment and accountability Process robustness and sustainability Definition of roles and responsibilities Monitoring and evaluation Training	 Difficulty finding skilled French speakers that are willing to work in Chad is universal – not HCR specific. HR policy forced field team to accept inexperienced supply staff in critical roles UNVs fill critical field positions (eastern Chad sub-offices) Senior supply post (P4) in NDJ empty for 14 months because they were unable to find someone so they promoted a strong performer that is new to HCR International staff R&R consumes 1/3 of capacity. (2 weeks off every 6 weeks) Intl staff - of the 5 supply posts - 1 new to HCR, 2 never worked in supply, 1 seasoned HCR with 2 years supply experience, 1 unknown. National staff - roles and responsibilities seem clear, they understand their job and have the tools necessary to do them Accountability - Serge feels and acts responsible for the success or failure of the supply chain, but lacks clear information regarding the root cause of problems or tools to monitor supply chain performance
Relationships	Sheer volume of programs and partners makes planning further complicates operations. GTZ partnership is unsuccessful from all sides – it must be fixed.
Managing partners (IP's, Logistics service providers, suppliers, etc) Collaboration (other humanitarian orgs + external) Benchmarking/ sharing best practices	 40 + implementing partners. By volume they are difficult to manage well and, in addition, these partners too suffer from the same problems of infrastructure and difficulty to find staff willing to work in Chad GTZ as dedicated logistics partner is at the forefront of financial and process constraints. Relationship is broken and performance is poor - all sides admit GTZ is under-funded. Lack of ownership in broader relationship with GTZ is inhibiting progress. Collaboration with other agencies is generally positive, but all agencies have constraints. Logistics cluster is historically weak but perhaps improving in the east - non-existent in NDJ.

6 Commodity Analyses:

Order lead-time: is long (5-7 months average) but improving slightly in 2008. In 2007, critical orders to replace losses from took on average 9 months. Computers lead time improved from 6 months to 2 months- six months for air shipped product is inexplicable.





Approval time – variable but generally not substantial (note: this does not include the email negotiation in advance of Req. Entry. Ironically the only item you airship regularly has the longest approval time (conclusion not clear)

Order size – in 2008 it appears that there has been a change to consolidate the orders for the year (soap, blankets, cars, spare parts). In a country with high security risk and limited storage, we would advise to think about splitting the orders (perhaps twice per year).

2007

Commodity	No. Orders	Total LT	Approval (days)	Delivery (days)
Blankets	5	6.5 months	1	194
Sanitary Napkins	4	9.3 months	5	273
Spare parts	5	4.8 months**	1	141
Toyota vehicles	4	9.3 months	0	279
IT – computers	3	6.2 months	1	202
Soap	No international		0	133

^{*} One order took 2 years

2008

Commodity	No. Orders	Total LT	Approval (days)	Delivery (days)
Blankets	2	5.6 months	11	146
Sanitary Napkins	2	Not arrived	1	NA
Spare parts	1	Not arrived	2	NA
Toyota vehicles	12	4.7 months (6 arrived)	1	141
IT – computers	7	2.4 months (4 arrived)	8	55
Soap	2	2.4 months (1 arrived)	1	148

The view from the field is compelling, but equally disconcerting was the reality coming from our comparison of the same information between the field perspective above and the MSRP view below. The last two columns show significant differences in receipt dates between MSRP and the field. The following comments come from our more global analysis of the order related data:

- Local arrival information not in sync with system information and bills of lading
- No guides on order quantities for countries order quantities are always high
- No guides on sourcing from stock vs. via PO

^{**} Three small orders came in 2 months, substantial orders took 8 months





- · No local knowledge on 'smart' order quantities, e.g. full containers
- There are 2 receipt moments: 1 financial receipt which triggers payment, 1
 physical receipt once in inventory; triggering payment is often much done earlier
 than physical receipt
- Data maintenance: product catalogues not always up to date
- Spare parts inventory: not manageable without individual item numbers

Order No.	Product	Quantity requested	Actual PO quantity	Time local entry to PO date	Order to receipt time NDJ	Order to Last Receive Date in MSRP
8364	Soap bars	200000 kg	200000 kg	1 day	149 days	48 days
6508	Blanket woven	63000 units	18000 units	7 days	198 days	51 days
6085	Sanitary napkins	49980 mtrs	60060 mtrs	23 days	195 days	65 days
7372	Toyota Land Cruiser	15 units	12 units	7 days	301 days	144 days
7524	Lenovo notebook	4 units	4 units	16 days	288 days	137 days
5720	Options/spares	1 lot	1 lot	3 days	41 days	67 days

Chad conclusions:

The entire supply infrastructure in Chad is so fragile that ongoing major disruptions in supply and logistics activities should be expected. In the best case, this means that beneficiaries will be underserved and staff living and working conditions will stay poor. In the worst case, HCR faces serious potential security (cars breaking down, warehouses inadequately protected) and safety issues (vehicle accidents or communications ruptures).

Chad specific recommendations:

 Infrastructure investment – Chad needs to prioritize and make hard choices. The spiral of underinvestment in infrastructure presents important risks to the operations and the credibility of HCR. If HCR can't serve all of your objectives with the budget available, then we recommend that you massively scale up investment or scale down your objectives so that you can do what you intend to do well.





- 2. Fix the GTZ relationship this must be done jointly at the HQ and field level with a focus on operations not the minutiae of budget structure. Today, GTZ is unable to properly perform what HCR would like them to do at the current funding level. As stated with the infrastructure overall HCR needs to either limit span or increase funding.
- Find experienced supply staff to re-enforce operations. Chad's combination of outside staff and inexperienced HCR staff means that an even higher investment in training and support is necessary. Do not accept to have inexperienced staff in the east.
- 4. Support HQ efforts to install a regional warehouse outside of Chad to shorten the supply chain allowing you to be more responsive to needs. In addition to performance benefits and cost savings, this reduces the elevated inventory risk (combination of high-security risk and inability to insure)
- 5. Perform a one-time amnesty in asset management. When the field feels confidence that the tools and processes to manage assets on an on-going basis are in place then appeal to the controller's office for an exemption to the rules. Set a date (December 31, 2008) and get these things off the books. Execute the disposition in the first three months of 2009 (or perhaps time it for the rainy season?)





8. Appendix II – Case Study: Iraq, Syria, and Jordan

Iraq, Syria, and Jordan – Supply Chain Assessment Visit Fritz Institute

Summary:

In August 2008 UNHCR asked the Fritz Institute to conduct an analysis of its supply chain. From the start, the Deputy High Commissioner asked Fritz to focus on the "integrated" supply chain and the issue of accountability for supply chain performance. To this end, the Fritz team has spent one week each in Geneva and Budapest and conducted field visits in Syria, Jordan, and Chad.

The objective of the field visits was to observe the structure of the organization and supply chain processes, hear from the field perspective what is working or not working, and objectively assess the functioning of the integrated supply chain.

Context Syria / Jordan / ISU:

Combined they are the largest UNHCR operation with a total budget of \$260 million dollars. Amongst them Syria is by far the largest operation at \$102 million and Iraq is second at \$45 million. Activities are intended to support the more than 5 million Iraqi's displaced by the war (2.5 million refugees + 2.5 million IDPs). These operations started in 2006 with the rising international awareness of these needs and accelerated dramatically when operations began to scale up in the beginning of 2007. The environment is dynamic based principally on the security situation in Iraq in terms of access as well as ongoing population movements.

Iraq itself is a difficult place to work due to security constraints and subsequent lack of partners to conduct operations. In 2007 the change in security allowed an increase presence in the country. This means that there is now better visibility to operational activities and improved oversight. Logistics for product delivery are simplified (direct road access to Baghdad) and complicated by evolving importation and movement formalities. In Iraq, infrastructure is highly variable because of the damages caused by the war; however. Historically Iraq had very good roads, commercial resources (trucks and warehousing) as well as product availability.

Syria is a relatively stable and simple work environment. Security is generally good but perhaps deteriorating and infrastructure is very good with good quality warehousing, transportation, and locally available products, Formalities consume time but are not generally an obstacle to operations. Only limited partners are available and in fact UNHCR is dependent of one implementing partner Syrian Red Crescent Societies (SARC).

Jordan is a significantly smaller operation with abundant partners and labor resources and warehousing and transportation resources are abundant and formalities are straightforward.

	ISU - Iraq	Jordan	Syria
Context	Iraq is hard - limited access makes program management difficult to plan	Jordan is relatively easy from an operations perspective	Syria is a massive program but the country offers good infrastructure and few obstacles.





	- Biggest in total \$260 million (Iraq \$45 million) - Infrastructure inconsistent - in some areas good in other areas non-existent	- Modest program at \$37 million - Good infrastructure - tarmac roads, good trucks available, direct port access in Aqaba	Large program - \$102 million - Good infrastructure - tarmac road, good trucks, excellent warehousing, good
Scale Country infrastructure Security	- Security is the major obstacle. Until recently international presence was impossible, today it is on a limited basis Political obstacles to logistics arise but can be solved with time (clearance programs at Jordan/Iraq border)	- Minimal security concerns - Political obstacles to program objectives are minor	manufacturing - Minor security concerns - Political obstacles to program are minor
Organizat- ional Will	Senior staff understand su processes and resolving p	upply's place and are active problem	ely involved in supporting
Vision and commitment Culture Getting past 'audit'	- Iraqi refugees have gotten a lot of attention since 2006. This is true in general but also specifically inside UNHCR. This attention from the High Commissioner on down has leant operational support and financial resources.	Relatively small operation seems to be overshadowed by Iraq and Syria	 Operations in Syria specifically are the focal point of the Iraqi response. Distribution activities are very large. This makes any potential supply chain issues even more visible. Operation appears to have more financial resources and flexibility than others.
Supply Chain Strategy	of necessity in Iraq preser	y is clear, defined, and app nts challenges for monitorin	g.
SC place at the table Value creation Leveraging across programs Pro-active action Cross functional integration	- Supply reports to Rep - until recently no national staff support Current team seems to be settling in and reasonable in light of activity level Cross functional work is limited to the day-to- day- new deputy rep arrived and they were pleased to have one of the first high level team meetings to discuss issues Benefit of senior and experienced supply officer is evident. It's easier for him to find his place at the table, but still program owns the show and irrational logistics' decisions	- Admin officer responsible for supply - seems to have a solid relationship with program and rep. She seems to understand supply and fits with the nature of the programs today - if operations scale up this level of support may be inadequate - Re-active organization - Logistics energy consumed almost entirely by infrastructure related improvements in 08. Investments that seem short-sighted in light of pending move. Could that waste have been avoided with better planning?	- SC is squarely at the table and valued - but there is no UNHCR supply officer. Supply Chain is represented by the program office. The scale of physical operations demand make supply management central to the success of the operations Team is dynamic and pro-active in trying to improve stock management, record keeping, etc Cross functional integration is either great or terrible depending on how you look at it. Supply is truly integrated into the





	(sending trucks to border without proof of clearance) happen regularly By nature the Iraq team is composed of independent and experienced people. Pro-active and reasonable solutions are happening daily	- Budget drives the NFI activities - in 07 the delay in approval for the entire budget meant that supplies were not available on time to do the "winter distribution"	Program team, but they don't exist as an independent entity.
Process		trumps process in operaterms of tools usage a	
Focus on key business processes Modern process management Collaborative improvement	- Access to Baghdad poor – either long and expensive or prone to border delays (also expensive) - Budget driven more than planning driven. Shelter project (major NFI activity) was rushed by funding, beneficiaries changed, and supply destination only recently identified - Field very flexible - accommodate budget variations - \$5mil for housing spend NOW. Supply officer uses personal network to look for items in Dubai and make trades in the region Personal relationships and UNHCR experience compensate for process problems. E.g. Rick regularly gets Dubai stock report and is proactively looking for alternate sourcing before contacting Budapest.	- Basic supply chain management processes are not in place because the scale of operations, staffing, and proximity to ISU. Little ongoing distribution activity Pro-active planning just starting to take place - e.g. first pro-active vehicle plan for the country being done during our visit Delays in funding meant that 07 cold weather distribution never happened	- Good planning - written and clear plan available for all with 6 month horizon. Plan is specific and accurate over time Frustration with international procurement is acute. Unclear whether IT order lost and misentered. Equipment took 6months to arrive - Very dynamic and flexible. Borrow blankets from Jordan to replace items delayed. Personality driven organization — program team highly implicated in supply chain problems
Tools		t (but expanding). Monitori and both supply and demar leguate but basic	
Technology Dashboard / KPIs	-MSRP - PO's and Reqs in system but inventory was not. Since our visit Mike's team was there training and adding inventory into the system. Supply officer believes in the value of MSRP and is relatively satisfied. They	- PO's and Reqs in system. Not used for management but no major problems	- No Reqs or PO's in system at field level. Changed since our visit but program still doing manual requisitions. MSRP unused because of supply staff turnover and lack of UNHCR staff. This will be an





	had never seen the pipeline report provided to us by Budapest. - Very sensitive to the need of operations but no benchmarks or reporting. Experienced supply officer seems to be effective in managing priorities and solving hot problems but has no tools to do so.		ongoing problem and there is no plan to solve it. - Distribution reporting - monitors activity levels and losses but is all done outside of MSRP. Team has the best understanding of overall operations, losses, and constraints using simple excel spreadsheets.
People	staff undermines institution	mic and effective, but use onal knowledge and progr dividuals seem to be effecti	ess on tools. Regional
Recruitment and staffing Motivation empowerment and accountability Process robustness and sustainability Definition of roles and responsibilities Monitoring and evaluation Training	- P3 post upgraded to P4 with Regional responsibility - interaction between Syria/Jordan/ISU is good but responsibilities are not clear and other countries are not included (i.e. Lebanon) - Seconded staff plays important role. Currently working on IP monitoring defining warehousing and activity report - Future move into Iraq may present challenges for finding experienced staff willing to work there Accountability - Dep Rep - The rep and the team are accountable. Iraq - remote operations are difficult to manage.	- No Supply officer only an asst. supply post. Supply managed by Admin supported by Regional in ISU office Rely on ISU for solving problems.	- Supply reports to Program but is well integrated into program activities - sharing planning information, resolving problems together, etc No UNHCR supply officers because they rejected all internal candidates and preferred to use seconded staff. Turnover is an important problem and lack of understanding of UNHCR is compensated by strong program officer and backup from regional supply officer Personality driven organization — program team highly implicated in supply chain problems
Relation- ships		nt amongst countries – Ira n relationship with SARC cooperation is limited.	
Managing partners (IP's, Logistics service providers, suppliers, etc) Collaboration (other humanitarian orgs + external) Benchmarking/ sharing best	- 10 IP's in Iraq. Little historic visibility but improving since intl staff movement to Iraq was extremely limited. All partners face extreme constraints on activities. Training on UNHCR processes and reporting requirements is on- going. Trying to pre- qualify partners to authorize local	- 18 implementing partners. No major issues noted - OTC also provides logistics support for Jordan	- Single IP (SARC) comes with pro's and con's. Bottom line they are getting the job done - massive and regular distributions are going relatively smoothly. Relationship is delicate because of SARC's political connections, their internal structure (highly centralized





practices

purchasing - OTC logistics partnership appears to work well, although lack of financial accountability is surprising. Field staff didn't know how much anything cost, warehousing, holding containers, etc. They will re-bid the contract next vear. - Limited collaboration with other agencies. Possible move into shared structure in Amman with other agencies should

facilitate contact.

control) and the lack of alternate partners. Managing relationship consumes lots of program time - Warehousing and manufacturing partners are strong and provide high quality service - Logistics cluster not important, but relationship with WFP is close because of the massive scale of food operations. UNHCR manages distribution with 3 commodities provided by WFP major issues regarding storage of WFP commodities are being

resolved.

ISU conclusions:

The sourcing strategy for the region takes good use of strong local and regional vendors. The level of infrastructure (roads, transportation, storage, etc) is good. The major constraints in this operation are security and the bureaucracy of crossing into Iraq. In general goods are available when needed and the supply chain is relatively short and flexible. Concerns in this region are based on the lack of process discipline and limited use of tools. There is a risk of loss of continuity and institutional knowledge that is exacerbated by high turnover and lack of UNHCR supply personnel in parts of the operation.

ISU specific recommendations:

- 1. Personnel Syria There should be UNHCR supply staff on the ground in Syria. That is not to say that the team on the ground should be put into the position of working with someone unqualified. The concern about continuity presents a real risk to the organization particularly if there is a turn over with senior management in programs. Finally, if it is not possible to have a UNHCR supply officer directly in the operation, someone in the organization who is involved in managing the supply chain should know the details. This operation represents the future of "modern aid distribution" in terms of process, technology and standards. It would be a shame not to have anyone inside the supply organization carry forward that knowledge to other countries. This position should be one of the most coveted supply posts don't force the field to compromise in terms of quality, but get someone with long-term UNHCR potential in that job.
- 2. Reinforce connection between strong regional suppliers and SMS. This should naturally happen in the evolution of the vendor review process, but the turnover





in personnel makes the partnership with Al Houda particularly vulnerable. Syrian suppliers should be prioritized in the rollout of a vendor review process (KPI review, annual vendor meetings, etc). Using this partnership as a case could be interesting with respect to:

- a. Middle east suppliers that could facilitate faster response in east Africa
- b. Dynamic pricing the vendor claims (which should be validated) that they have been selling goods at a loss to UNHCR to honor their frame agreement, on the supposition that this cooperation will be valued long term. They propose writing a contract for specific (highly volatile) commodities in which the unit price is linked to a change in under-lying commodity (e.g. mattresses linked to the price per barrel of oil). This should be explored as part of the on-going strategic purchasing orientation.
- c. Defining service levels based on a deep understanding of process and capacity. For example, pre-purchasing mattress covers because they are a bottleneck and easy to store, while the mattresses themselves are fast to produce and too bulky to store. This is one example of a commitment to purchase that could dramatically improve response time in an emergency.
- 3. Regional structure Like many places the nature of the refugee situation seems to call out for a regionally coordinated response. The current organization has at least two official "regional" posts, which have no job descriptions, are not colocated, and are not coherent from a management perspective. If it is felt that a regional organization is necessary then the posts need to be created based on clearly defined objectives with specific regional responsibilities.
- 4. Implementing Partners- Bo Jordan and ISU, in particular have numerous implementing partners that vary in size, complexity and level of service. The introduction of IP procurement in recent years presents a huge challenge in terms of ensuring compliance with procurement rules. Work with SMS and others in the organization that will be tasked with the responsibility of creating streamlined tools and communication process for managing and training IPs. This task has already started with the distribution and inventory follow-up tools being developed in Amman. SMS needs to follow and support this activity to develop a scalable tool that can be used in other countries to monitor IP performance.





9. Appendix III – UNHCR Supply Chain Strategy Template

This appendix provides a skeleton that UNHCR can use as a basis to develop a document describing the current supply chain strategy. The intent of this appendix is to give UNHCR's SCM team input into the structure and content for a document describing supply chain strategy. This is not to be construed as a completed or comprehensive supply chain strategy and will require the strategy owner to drive it forward.

The supply chain (SC) strategy provides direction that guides UNHCR and its partners in designing, operating and monitoring its supply chains. The term "UNHCR supply chain" refers to the full set of entities that work on supply chain activities, including entities both within UNHCR and UNHCR's partners. The strategy should be reviewed annually.

There are 14 elements to the SC strategy:

1) Mission	8) Peo	ple
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2) Product assortment/rollover 9) Relationships

3) Segmentation 10) SC Integration and Improvement

4) Planning and control 11) IT/Systems

5) Funding 12) Performance measurement

6) Sourcing 13) Interagency collaboration

7) Delivery 14) Voice/Communications strategy

1) Mission

Key Question: Whom will the supply chain serve and with what range of products and services?

The UNHCR supply chain supplies food, non-food items (NFIs), camp infrastructure and country infrastructure items to meet the needs of persons of concern in all locations in which UNHCR operates. The UNHCR supply chain also supplies these items, when asked and agreed, to support the operations of partners in response to natural disasters.





2) Product Assortment/Rollover

Key Question: What philosophy guides the choice and specification of products and the process of introducing, rolling over and discontinuing products?

For Emergency Response, EPRS selects and specifies a limited range of items that are recommended for use in ER operations in order to increase volumes of these items so as to reduce complexity and procurement/SC costs, while meeting beneficiary needs; products consist of "family units" (1 family unit = 1 tent, 2 jerry cans, 2 mosquito nets, 5 blankets, 1 kitchen set, 2 plastic sheets); field kits for staff.

For mainstream needs, a limited range of items, including the ER items, are recommended for use. Framework agreements are developed for a subset of these items.

Comment: Additional statements should be made about 1) product assortment when local procurement is done and 2) strategies for particular commodities, such as vehicles and ICT.

Product development is a separate activity; supply chain plays a limited role in development of assortment.

3) Segmentation

Key Question: How are supply chains segmented, based on product needs and customer needs? What are the segments?

Supply chains may be segmented based on operation type, region, and product category:

- Operation type: ER, mainstream, pre-positioning
- Regions: Global, regional (multiple countries), local (country)
- Product category: food, beneficiary-distributed NFIs, ICT, vehicles, other NFIs, services
- · Purchase volume: low, medium, high
- Availability for purchase in local markets

Comment: Additional statements should be made about the major segments (groupings). The idea is that strategy for one segment will be different from strategy for another segment. For example, the strategy for ER operations will include use of global stockpiles. This section doesn't define the individual strategies, but does define how the UNHCR SCM team thinks about and defines segments (groupings).





4) Planning and Control

Key Question: At a high level, what is the nature of supply and demand? How does the organization ensure that supply meets demand while using resources well? What is the stockpile strategy? What signals control flow of goods?

Planning for ER operations entails envisioning the need for ER logisticians, ER infrastructure items and ER beneficiary-distributed items around the world, and making and monitoring plans to meet those needs.

- EPRS recruits, trains and maintains a roster of people who are on call to respond within 24 hours as ER logisticians. The number of people on the roster is in accordance with plans about how UNHCR will respond to anticipated ER activity.
- EPRS and SMS work together to plan for and monitor stockpile quantities to be held at pre-defined locations to support ER activities. For 2008, stockpiles in Dubai and Copenhagen support ER response. For beneficiary-distributed items, the target stockpile quantities for individual items support response for 500,000 beneficiaries. Thus, the total of the quantity on-hand and on order supports 500,000 beneficiaries for each item, with the exception of tents, for which the quantity supports 250,000 beneficiaries. The target quantities for infrastructure items are also in line with this activity level. A list of the items stocked in ER stockpiles for 2008 is included in Table 1 below.
- EPRS and SMS also establish temporary stockpiles of pre-positioned items in anticipation of potential emergencies, based on considerations of cost and response time.

	Table 1. ER Stockpile Items Held in Dubai and Copenhagen – 2008					
00000096	JERRYCAN,SEMI-COLLAPSIBLE,10 L	00002016	PREFABRICATED OFFICE/ACCOMODAT			
00000225	NISSAN PATRL, 4X4,SW, GL4200	00002028	BLANKET,HIGH THERMAL FLEECE			
00000238	TOYOTA LANDC, 4X4, SW STD4200	00002034	ANTI-SHATTERING FILM, WINDOWS			
00000579	SPARE PARTS, VEHICLE (OPTIONS)	00002040	KITCHEN SET, TYPE B			
00000607	SPARE PARTS,TOYOTA	00002419	VEST,BULLET PROOF,L			
00000666	GEN, JOHN DEERE, WC/40 KVA	00002422	HELMET,BULLET PROOF,L			
00000670	GEN, PERKINS, WC/100 KVA	00002616	PLASTIC,ROLLS, 4M X 50M			
00000679	GEN, PERKINS, WC/40 KVA	00002617	PLASTIC,TARPAULINS,4 X 5 M			
00001376	FIELD KIT,EMERGENCY	00002891	TRUCK, REFURBISHED,4X4, MB1017			
00001377	TRAVEL KIT, EMERGENCY	00003153	PLASTIC,TARPAULINS,4M X 50M			
00001459	BLANKET KIT, FRAGMENTATION	00003320	ACC,ANT 1/4 WAVE VHF GP340			





00001515	SANITARY NAPKINS, LADIES	00003381	ARMOURED VEHICLE,TOYOTA SW,4X4
00001981	TENT,HOSPITAL,10 BEDS	00004165	BUCKET,HEAVY DUTY PLASTIC,15L
	TENT,LIGHTWEIGHT EMERGENCY		
00001992	SHELTER	00004503	TRX HF CODAN NGT SRX
00001993	TENT,RIDGE,DOUBLE FOLD	00004504	TRX VHF MOB GM360
00001998	MOSQUITO NET	00004780	LAMP,FLASH,SOLAR
00002009	PREFABRICATED WAREHOUSE	00004925	RACKING,STANDARD PALLET

Planning for mainstream operations entails creating annual budgets for each operation that include a detailed list of items to be procured.

Mainstream operations may procure from ER stockpiles in the following circumstances:].

5) Funding

Key Question: What are the funding needs for working capital of the supply chain and how are those needs met? How does the organization ensure financial control while ensuring that funding release and budget approvals do not limit/delay flow of products?

For ER operations, funding occurs as follows:

• ER stockpiles in Dubai and Copenhagen were initially funded by _____. Once an emergency is declared, goods may be shipped to support the ER operation. Upon shipment, EPRS works with _____ to immediately transfer funds from _____ to SMS, so that SMS can place an order to replenish the stockpile.

At the close of each fiscal year, UNHCR reviews actual vs. target spending related to supply chain management for ER operations as follows: (Please provide details)

For mainstream operations, funding occurs as follows:

• For operations with AB budgets, the AB budget establishes the annual plan for procurement spend. Purchase requisitions for items falling within AB budgets must be approved ... by ...

For operations with SB budgets,_____ (Please provide details)

At the close of each fiscal year, UNHCR reviews actual vs. target spending related to supply chain management for mainstream operations as follows: (Require details)





6) Sourcing

Key Question: What philosophy guides vendor selection and contracting mechanisms? How is supplier performance measured? The major commodities purchased by UNHCR are listed in Table 2.

Table 2. Major Commodities Categories for 2008 (based on procurement spend, excluding freight)

- 1. Construction Materials (Iron, Corrugated Iron Sheets, Nails, Cement, Sand, etc.);
- 2. Fuel (Diesel, Petrol, Jet A1);
- 3. Vehicles (Terrain, Ambulances, Pick-Up, Sedans, Motorcycles, Trucks, Armored);
- 4. IT Equipment (Desktops, Laptops, Servers, Printers, UPSs);
- 5. Tents (LWET and Canvas);
- 6. Medical Supplies, Medicines and Medical Equipment;
- 7. Telecom Equipment (HF, VHF, Satellite);
- 8. Kitchen Sets:
- 9. Plastic Sheets and Rolls;
- 10. Blankets:
- 11. Power Generators:
- 12. Spare Parts/Tires;
- 13. Synthetic Mats/Foam Mattresses;
- 14. Mosquito Nets;
- 15. Cooking Stoves/Kitchen Sets;
- 16. Soap;
- 17. Office supplies/furniture;
- 18. Water Equipment (pumps, tanks);
- 19. Safety/Personal Protection Equipment (flak jackets, helmets, ballistic blankets);
- 20. Jerry Cans/Buckets:





- 21. Office Equipment (photocopiers, fax machines, air-conditioners);
- 22. Hygienic parcels/Sanitary Napkins;
- 23. Prefabricated Warehouses/Housing

For each commodity,	SMS works with	_ to define overall	preferred	sourcing	strategy
. ,					

UNHCR actively pursues local sourcing wherever possible, as a means to support the local economy, to minimize procurement complexity, to provide product that is acceptable to local tastes of beneficiaries and to make goods available quickly, subject to the following considerations:

- · Comparable or lower total landed cost, as compared to regional or global sourcing;
- · Sufficient availability of reasonable quality goods;
- Lack of negative impact on goods availability to local non-beneficiary population
- Other considerations?

UNHCR sourcing preferences for major commodities are detailed below in Table 3.

UNHCR uses framework agreements to [fill in] for high usage commodities. In 2008, UNHCR expects to purchase roughly [fill in] % of its procurement spend through framework agreements. UNHCR frame Key contract terms included in all framework agreements are:

UNHCR shares framework agreements with other UN agencies as follows:

UNHCR allows Implementing Partners to procure under the terms of its framework agreements as follows:

UNHCR monitors supplier performance as follows:





Table 3. Sourcing Strategies by Commodity

Item category	Preferred route	2nd option	3rd option	Reason	Emergency stock?	Mainstream stock?
Construction materials	Local suppliers	Regional suppliers	International suppliers	Bulky items; often available locally; provided to beneficiaries in limited number of operations	No	No; sometimes agreed to stock at supplier
Fuel	Local suppliers	Regional suppliers	International suppliers	Near future: Funds identified to engage expert consultant to work with SMS on developing a best solution for procurement and delivery of fuel, e.g. global FA managed locally; local availability	In majority of operations in the field; 10-50K\$ stock	No
Vehicles	Toyota Japan or other manufacturers	Dubai/Copenhagen stockpile	Global/regional commercial stockholders (e.g. Gibraltar) or official local dealers		Dubai (20 vehicles)	30-70 vehicles; 30 = reorder point
IT	Global FA	Stock pile at suppliers (emergency stock)	Local procurement (not very large)		Stock at supplier premises	Most frequently used items stocked locally (via IT budget); there is a reorder point





Item category	Preferred route	2nd option	3rd option	Reason	Emergency stock?	Mainstream stock?
Tents	Global FA	CES	Local procurement (small quantities)	Tents are also stocked locally	In CES	In-country
Medical supplies	International manufacturers or commercial suppliers (determined together with local government)	Locally because of some local reason (mostly determined by the MoH list of approved drugs and medicines, import restrictions, etc.)		Distribution immediately through IP therefore no stocks	-	-
Telco	International FA	Telecom stockpile in Dubai or stockpile kept at supplier's premises		Regular supply according to IFA; almost never sourced locally (due to technical restrictions)	Dubai	At suppliers and CES
Kitchen Sets	International FA	CES	Little local procurement (small quantities); only for emergencies		CES	Local + regional stock
Plastic sheets	International FA	CES	Little local procurement (small quantities); only for emergencies		CES	Local + regional stock
Blankets	International FA	CES	Little local procurement (small quantities);		CES	Local + regional stock





Item category	Preferred route	2nd option	3rd option	Reason	Emergency stock?	Mainstream stock?
			only for emergencies			
Power generators	International FA	Local procurement (for a few models only)		Only emergency (some models)	Selected generator models kept in Dubai	none
Spare parts	Local FA	Regional FA	International FA	Local procurement for small quantities, large via regional or international FA	None	Selected fast movers local stock
Soap	Local procurement	Regional procurement	International procurement	Much local availability; cheap product	No stock	No stock except for programs that do regular/ongoing distribution
Office supplies	Local			Discouraged to source internationally because of local availability and costeffectiveness issues	Some in office kits	No
Water equipment	International FA	Local/regional FA if not specific items (could be e.g. pipe, fittings)		Water projects take a long time so no need to store these for regular projects	Some emergency stock (need to increase?)	No
Protection equipment	International FA			High standards that need to be kept	Some emergency stock (need to increase? No stock for vehicle ballistic blankets, rather stand by	No





Item category	Preferred route	2nd option	3rd option	Reason	Emergency stock?	Mainstream stock?
					arrangement for installation with a certified supplier in Dubai	
Jerrycans	International FA	CES	Little local procurement (small quantities); only for emergencies	Little local procurement; only for emergencies	CES	Local + regional stock
Office equipment	Local	Regional/ international			Some faxes kept in Telecom stockpile in Dubai	No
Hygienic items / basic NFI	International FA	Sometimes local procurement			CES	Both international and local stock
Warehousing / housing	Local procurement (if available)	International Fas			CES – limited quantity for emergency response	no

Please note that this is the first attempt to complete the Sourcing Matrix and some information may be incomplete. This matrix was provided by Goran Stojanovski of SMS, Budapest.

7) <u>Delivery</u>

Key Question: What philosophy guides to-stockpile, to-country and in-country transport and delivery?





8) People

Key Question: How is the organization structured and staffed to achieve the mission of the SC in support of the business?

9) Relationships

Key Question: What philosophy governs outsourcing decisions and partner selection? How does the organization ensure the effectiveness of partners and of its collaboration with partners?

10) Supply Chain Integration and Improvement

Key Question: How does the organization ensure collaboration and coordination along the chain? How does the organization drive supply chain process improvement?

11) IT/Systems

Key Question: What philosophy guides investment and use of IT/systems?

12) Performance measurement

Key Question: How is supply chain performance monitored, so that action can be taken to ensure ongoing supply, and measured, so that long term improvement can be undertaken?

13) Interagency collaboration

Key Question: How does UNHCR approach collaboration with other UN agencies and other humanitarian organizations in the area of supply chain management?





14) Voice/communications strategy

Key Question: How does the supply chain team articulate its strategy to lead supply chain staff in their work and to gain support and voice within UNHCR and with partners?





10. Appendix IV – KPI Framework

Country Supply Chain Dashboard - DRAFT date re country: person responsible for supply in c		concern:	s period from:	to:
Service Level	aree n	vellow	red	
Service sesful was HCR at delivering country infrastructiure items this period? Supply available on time for distribution	J.cen	I	Ĭ.	(e.g. Cars, IT, generators)
Targeted number of distributions in period and year-to-date Actual number of distributions in period and year-to-date		(number peri		(number year-to-date) (number year-to-date)
% of distributions on time % late because of supply		(%) (%)	5.74	
what is the \$ value of distribution last period Emergency Preparation / Contingency stock		(\$)		
Contingency stock level target		target # ben		
Contingency stock coverage	Ļ	_actual level a	is % of target	level (in sets)
Supply Chain Lead time	request	PO approval	Pacaint in	
	input to PO	to EDP	country	
How long on a verage does it take to get goods to the country stock? MSR lead time	a pp roval	receipt	warehouse]
POR - local POR international	1			1
fill in major receipt point used in leadtime analysis	local #	regional #	global #	ž.
Number/\$ of POs received this period per source type - Framework Agreement ber/\$ of Pos received this period per source type - non-Framework Agreement	local -	regional -	GIODAI -	
rank 3 most important supply 8, delivery issues	1		W A	
	2			
Inventory health -	green	yellow	red	-
Do you have the right amount of supply to meet needs in the coming period? what is the value of inventory (\$)				j
Inventory age: % of total \$ value inventory per age bucket	< 1 month	> 1 year)	
Quality -		127	27	
Did the field receive what was ordered and in good condition when it was received?	green	yellow	red	1
did the items meet your needs	yes	ne utra/	по	rea son:
% of goods damaged in transit (% of total value received damaged) losses (\$)		(dollar value)		
partner information available		(dollar value)		
Cost of the supply chain What are costs involved in getting goods to beneficiaries	a is tean on an	sea transport	land transpor	
Total KG coming into the country by	all dalispon	. sea transport	land danspor]
total expenses this period for each mode of transport to country RESULT: cost per kg per mode				
total value of goods received this period				ĭ
total costs spent on warehousing in country this period				
total country warehouse space in m2	8			
% of country warehouse space occupied		1		





11. Appendix V – MSRP Inventory Management Data Analysis

Agenda - data analysis

- · Inventory composition
- Order processing
- · Key take-aways data analysis

1

Emergency inventory composition*

Descript	CES	CESD1	ZAFD1	Grand Total
JERRYCAN, SEMI-COLLAPSIBLE, 10 L	106.900	32,580	18.600	158,080
SANITARY NAPKINS, LADIES		1.887.648		1.867.648
YENT HOSPITAL 10 BEDS		- 30		- 30
TENT LIGHTWEIGHT EMERGENCY SHELTER	1.445	14,130	9.823	25,407
TENT RIDGE DOUBLE FOLD	1275	3.794	-2.50	3.794
MOSQUITO NET	33,000	63,868	18.500	115.366
BLANKET,HIGH THERMAL FLEECE	10	260.330	43.000	303.340
KITCHEN SET, TYPE B	-36.768	11.976	8.100	55.844
PLASTIC ROLLS, 4M x 50M	1.207	3.704		4.911
PLASTIC.TARPAULING 4 X 5 M	22.345	21.318		43.663
PLASTIC TARPAULINS AM X 50M	.957	£100		2.057
BUCKET HEAVY DUTY PLASTIC.15L	27.988	70.148	8.576	106.712

Findings:

many items kept in 2 or 3 location, napkins only in 1; there is no clear stocking strategy
 stock does not seem to be managed in terms of units that are always distributed together as there are significantly unequal stock levels for these items (e.g., blankets, tents, jerrycans)

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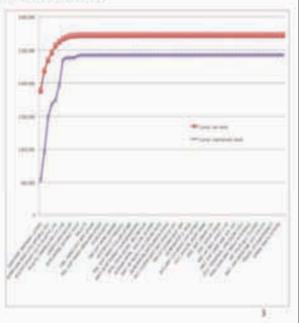
^{*} Focus on emergency items for beneficiaries, not computers, field kits etc; source: MSRP data aug2007





Emergency vs mainstream stock composition

 10 emergency items make up 99% of emergency stock (in units)



Source: MSRP.

Stock vs orders in mainstream vs emergency

	EM stock	Mainstream stock	quartity in MSR 2006	Requested PO quantity 2008
SANTARY NAPKINS, LADIES	1.887.648	535271	1739916	804273
BLANKET HIGH THERMAL FLEECE	303.340	426106	.535136	673075
JERRYCAN SEM-COLLAPSIBLE 10 L	. 156.080	523427	230793	257200
MOSQUITO NET	115.368	201873	312900	545454
BUCKET HEAVY DUTY PLASTIC: 15L	106.712	54704	28100	6000
KITCHEN SET, TYPE B	: 55.944	231622	201218	230900
PLASTIC TARPAULING 4 × 5 M	43:663	363764	296110	456256
TENT LIGHTWEIGHT EMERGENCY SHELTER	25.407	24965	43616	23100
LAMP, FLASH, SICKAR	20.000		INA	10300
PLASTIC ROLLS, 4M X 50M	4,911	2173	1138	anus.
TENT RIDGE DOUBLE FOLD	3.794	29990	364	10442
PLASTIC:TARPAULINS,4M X 50M	2.052	8798	8929	1500

Analysis

- total 2008 requested PO quantities hardly exceed current inventory levels, stock turns low (<2)
- Emergency (EM) and mainstream not balanced (eg. significantly more napkins in emergency stock but considerably fewer plastic tarpaulins

Source: MSRP

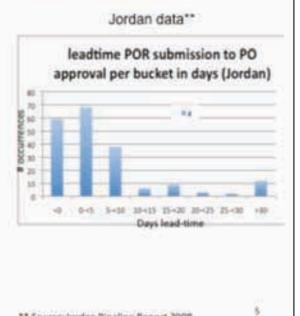
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Order processing – PO request approval lead-time

- Every POR and every PO require approval
- Most PO requests are turned into PO and approved within 5 days
- 50% of all PO-s is approved the same day of entering the PO, another 25% within 5 days after*



* Not shown in picture

** Source Jordan Pipeline Report 2008

6 items investigated*

Item (item nr)	Emergency inventory	Mainstream inventory
Soap (00001511)	n/a	544279 KG
Toyota Landcruiser (00000240) Blankets (00002028)	n/a 303340 pieces	31 vehicles 426106 pieces
Sanitary napkins (00002098)	n/a	477672 units
Notebook Lenovo (00004690)	n/a	38 units
Spare parts	n/a	n/a

Source: Chad local order spreadsheet; MSRP data

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Order analysis

Orderno	Product	Quantity requested		Time local entry to PO date		Order to Last Receive Date in MSRP
8364	Soap bars	200000 kg	2000000 kg	1 day	149 days	48 days
6508	Blanket wove	63000 units	18000 units	7 days	198 days	51 days
6085	Sanitary napkins	49980 mtrs	60060 mtrs	23 days	195 days	65 days
7372	Toyota Land Cruiser	15 units	12 units	7 days	301 days	144 days
7524	Lenovo notebook	4 units	4 units	36 days	288 days	137 days
5720	Options/spares	1 lot	1 lot	3 days	41 days	67 days

Analysis:

- . Local arrival information not in sync with system information and bills of lading
- · No guides on order quantities for countries order quantities are always high
- No guides on sourcing from stock vs via PO
- · No local knowledge on 'smart' order quantities, e.g. full containers
- There are 2 receipt moments: 1 financial receipt which triggers payment, 1 physical receipt once in inventory; triggering payment is often much done earlier than physical receipt
- · Data maintenance: product catalogues not always up to date
- Spare parts inventory; not manageable without individual item numbers

Source: Chad local order spreadsheet; MSRP data

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Key take-aways

- Data are insufficient to support supply chain decision making
 - Data is not always kept in manageable format, e.g. spare part information, product roll-over
- There is limited view on the indirect effect of supply chain decisions:
 - Large order quantities take long to manufacture at suppliers and fill up warehouse space
- There are large variations in practices:
 - Sourcing strategy: when from stock vs PO?
 - Lead-times (including internally UNHCR)

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12. Appendix VI – Humanitarian Field Logistician Requirements and Qualifications

Logistics and supply chain management is a "customer" oriented service. It is managed within a frame of administrative and financial rules, national and international laws and regulations, and technical requirements. The role of the humanitarian logisticians is to plan, implement and control the efficient, cost effective flow and storage of goods and materials, as well as the related information from point of origin to point of consumption, for the purpose of meeting end beneficiary's requirements.

This document specifies the qualifications and job requirements of a full-time humanitarian field logistician, as well as those based in offices providing a range of support services to those operating in the field.

MISSION

To support programme execution by delivering the right thing, at the right cost, at the right time, to the right place in conflict and stressful contexts is the day-to-day challenge for the humanitarian logistician.

KEY ACTIVITIES

- 1. Procurement
- 2. Warehousing and Inventory
- 3. Transport
- 4. Fleet Management
- 5. Import and export

1. Procurement

- > The function of procurement
- Sourcing
- Purchasing
- Progress monitoring and control
- Risk management

The function of Procurement

Create and enhance effective working relationships with suppliers.

Provide logistics information for the development of procurement plans and strategies.

Contribute to improvements in procurement operations as the basis of development of procurement plans and strategies.

Sourcing

Clarify the requirements for goods and services

Obtain and analyse supply market information and provide supply market reports. Obtain supplier data and information, analyse it and provide reports on supplier capability.





Contribute to supplier appraisal systems.

Contribute to the implementation of sourcing strategies.

Purchasing

Contribute to the implementation of procurement systems and procedures.

Develop procurement plans for supplies and services to be purchased.

Work with users and provide procurement input into development of specifications.

Evaluate supplier capability and pre-qualify potential suppliers.

Produce appropriate documentation.

Place order or contract according to procurement rules and procedures

Progress monitoring and control

Operate and maintain an expediting system.

Monitor and analyse records of receipt and inspection of supplies and performance records for services.

Identify performance history from analysis reports and implement remedial actions.

Establish feedback mechanisms for information on supplier performance.

Co-ordinate improvements in supplier performance.

Risk Management

Identify and manage critical goods and services

Identify risks and create controls to manage them

Follow a code of ethics to guide procurement activity

Follow a disciplinary/termination procedure in line with organisational rules and regulations

2. Warehousing and Inventory

- > The function of warehouse and inventory management
- Contribute to setting up a warehouse
- Managing warehouse operations
- Contribute to the provision and care of warehouse resources
- Manage inventory

The function of warehouse and inventory management

Comply with warehouse and inventory management systems & procedures. Identify and contribute to the implementation of improvements in warehouse and inventory management systems & procedures.

Provide information for the development of warehouse and inventory management plans and strategies.

Contribute to the development of warehouse and inventory management plans and strategies.

Contribute to setting up a warehouse

Contribute to the planning of an optimal warehouse layout.

Contribute to the evaluation and selection of the most appropriate warehouse processes and resources.

Contribute to the evaluation and selection of the most appropriate handling and storage equipment.





Contribute to the analysis and application of data related to supply and demand. Contribute to the identification of the regulatory and security requirements of a warehouse.

Manage Warehouse operations

Draw up a plan for the receipt and storage of in-bound goods, and the order picking and despatch operations

Allocate labour and other resources on a daily basis in relation to this plan.

Modify planned activity at short notice to be able to cope with contingencies that may arise.

Produce a plan or strategy for the optimal positioning of in-bound goods in the warehouse, and for the physical organization of the despatch function.

Use information as an aid to assisting the work of other parts of the operation.

Ensure that adequate controls are in place for the safe and efficient receipt, storage, picking and dispatch of goods

Analyse information on the performance standards of the warehouse operation

Contribute to the provision and care of warehouse resources

Ensure that equipment is regularly checked and that any servicing that is needed is carried out.

Analyse information generated from the regular checking and servicing of warehousing equipment.

Take decisions when unsafe equipment needs to be removed from the operation.

Manage Inventory

Perform demand capture operations

Forecast demand for goods

Obtain and analyse information on product availability and lead times.

Assess supplier performance and input to Vendor Rating system.

Monitor and maintain stock movement.

Audit stock levels and stock inventories.

Update, analyse, verify and reconcile stock records

3. Transport

- > The Goods to be moved.
- Origins, destinations and routes.
- Modes of transport.
- Movements.
- Managing Transport providers

The Goods to be Moved

Relate the loads to type constraints and legislative controls.

Select suitable handling methods for different types of consignments.

Plan loads to match variable demand and supply.

Origins, Destinations and Routes

Plan and schedule freight transits for single and part-loads





Use appropriate systems to audit current fleet performance, perform live order routing and prepare invoices and audit contractors.

Outline multi-modal routing relative to resources and time.

Modes of Transport

Contribute to the selection of an appropriate mode (or combination of modes) for any specific goods movement, and the appropriate vehicle within the mode.

Expedite movements through ports, by rail, air, road and sea, recognising operational characteristics

Set up the security precautions necessary for freight interchanges, depots and terminals.

Movements

Plan national and international movements.

Prepare resource plans for the movements of goods.

Prepare a security plan for a journey.

Manage transport providers

Select transport providers and establish contracts Manage the service provided by transport providers Monitor and analyse performance data

4. Fleet Management

- > The function of fleet management
- Setting up a fleet
- Managing a fleet

The function of fleet management

Comply with organisational fleet management systems & procedures.

Identify and contribute to the implementation of improvements in organisational fleet management systems & procedures.

Provide information for the development of organisational fleet management plans Contribute to the development of organisational fleet management plans

Setting up a fleet

Contribute to the specification of the requirements of the fleet

Identify relevant legislative and security requirements

Evaluate and select suitable vehicles and equipment

Evaluate and select suitable human resources

Establish operational systems and procedures

Establish a vehicle and driver performance measurement system

Establish maintenance systems and procedures

Establish supplies and control of fuel

Managing a fleet

Analyse orders for movement of goods and people

Prepare routing plans and schedules to meet orders for movement of goods and people





Ensure that drivers are assessed, evaluated and have suitable qualifications and are properly trained for the job

Ensure that appropriate documentation is completed correctly

Ensure that drivers follow correct procedures in the event of a traffic accident

Ensure that the operation complies with the relevant local regulations governing transport

Monitor costs and performance and prepare management reports

5. Import/Export

- Contract and order administration
- Import and export documentation
- Customs & Excise procedures and controls
- International commerce and methods of payment

Contract & Order Administration

Provide advice & information to other departments on the commercial requirements of International Trade.

Contribute to placing orders with international suppliers.

Process Export Orders and Enquiries.

Contribute to the administration of an Import/Export function.

Import/Export Documentation

Work effectively with the agents involved in import and export.

Provide the accurate and appropriate documentation for international trade and freight.

Determine the need for and obtain basic cargo insurance.

Monitor the progress or orders and goods through the delivery system utilising track and trace systems

Customs & Excise Procedures and Controls

Provide advice & information to other Departments on the Customs & Excise procedures and controls applicable to International Trade.

Establish the need for import/export Licenses.

Determine the correct Commodity Code of goods for customs purposes.

Ensure compliance with Import and Export Customs Procedures.

Apply the correct regulations to imports and exports.

International Commerce and Methods of Payment

Provide advice & information to other Departments on the relevant procedures involved with standard methods of payment.

Handle transactions priced and invoiced in a foreign currency.

Handle transactions that involve waivers and exceptions

Align import/export procedures to the method of payment.

Make available the Commercial, Transit and other Documentation required for payment.

Work effectively with the Intermediaries involved in the payment cycle.





QUALIFICATIONS

Highly competent in current word-processing and spreadsheet computer programmes.

Significant previous experience of international emergency relief work

Experience of working in or with developing countries

Able and willing to travel to hazardous locations for short periods of time and at short notice

Bi-lingual (English and French)





13. Appendix VII – Humanitarian Logistics Manager Requirements and Qualifications

Logistics and supply chain management is a "customer" oriented service. It is managed within a frame of administrative and financial rules, national and international laws and regulations, and technical requirements. The role of the humanitarian logistics manager is to operate at a tactical level to plan, resource and manage the supply chain and the implementation of supply chain strategy. To carry out these activities a humanitarian logistics manager will be managing and coordinating complex logistics and supply chain activities, managing and/or leading other logisticians performing activities and operating at the operational level (see Field Logistician Requirements and Qualifications).

This document specifies the qualifications and job requirements of a full-time humanitarian logistics manager.

MISSION

To support programme execution by delivering the right thing, at the right cost, at the right time, to the right place in conflict and stressful contexts is the day-to-day challenge for the humanitarian logistician.

KEY ACTIVITIES

- 1. Supply Chain Planning
- 2. Supply Chain Operation and Coordination
- 3. Supply Chain Improvement and Adaptation

1. Supply Chain Planning

- > Contribute to the development and implementation of global supply chain strategy and plans
- > Contribute to the development and implementation of programme strategy and plans
 - Configure supply chain
 - Plan resources
 - Identify supply chain controls
 - Develop and manage internal and external relationships

Contribute to the development and implementation of global supply chain strategy and plans

Provide input into the development of global supply chain strategy and plans.

Contribute to the implementation of the global supply chain strategy and plans.

Communicate information on the global supply chain strategy to others and seek commitment from them to implement the strategy.





Contribute to the development and implementation of programme strategy and plans

Provide input into the development of programme strategy and plans.

Contribute to the implementation of the programme strategy and plans.

Communicate information on the programme strategy to others and seek commitment from them to implement the strategy.

Configure supply chain

Identify the constraints of the operational context.

Identify the network requirements.

Obtain information on the nature of demand on the supply chain.

Plan the location and level of inventory

Investigate and select the transport methods.

Identify and select the location for facilities.

Map the supply chain network.

Plan resources

Identify and specify the resource requirements for the operation of the supply chain.

Select sources of supply for resources needed to operate the supply chain.

Produce a plan that identifies the human resources – number, roles and skills needed.

Assist in the recruitment and selection of people.

Specify and seek commitment to performance objectives for supply chain activities.

Identify supply chain controls

Identify and specify the requirements for information and reporting.

Specify the measurements needed to monitor the performance of the supply chain. Identify the appropriate systems and tools for operating and managing the supply chain.

Develop policies and procedures for managing the supply chain.

Develop and manage internal and external relationships

Identify the internal and external relationships that impact on the performance of the supply chain.

Identify the specific supplier and contractor relationships that impact on the performance of the supply chain.

Evaluate the nature and types of current relationships.

Develop the appropriate relationships with external organisations including suppliers and contractors.

Develop appropriate relationships with other areas and people within the organisation.

Identify the appropriate tools and mechanisms for managing the relationships.

Identify and overcome barriers to people working together and developing relationships.

2. Supply Chain Operation and Coordination

- Performance monitoring and measurement
- Resolving problems and adapting the supply chain





Providing advice and support

Performance monitoring and measurement

Observe supply chain activities to spot signals of potential supply chain performance problems.

Identify what data and information needs to be collected to measure and evaluate the performance of the supply chain.

Determine what methods to use to collect data and information on the performance of the supply chain.

Identify what records of performance need to be maintained.

Benchmark supply chain performance against historic data and other operations.

Analyse and evaluate data and information on supply chain performance.

Provide reports and results on supply chain performance to others.

Resolving problems and adapting the supply chain

Identify problems with the performance of the supply chain that need immediate actions.

Develop action plans to overcome supply chain performance problems.

Seek commitment to action plans.

Identify the support others will need to implement the action plans.

Providing advice and support

Identify people who need advice and support.

Provide others with advice and support.

Identify training needs and ensure appropriate training is provided.

Identify ways to motivate and develop yourself and others

Ensure compliance to policies and procedures.

Share and target information on supply chain activities that may impact others.

Ensure best practice in managing the supply chain is shared within the organisation.

3. Supply Chain Improvement and Adaptation

- Conduct supply chain review
- Identify improvement initiatives
- Introduce supply chain improvements

Conduct supply chain review

Conduct and evaluate an external supply chain review.

Conduct and evaluate an internal supply chain review.

Identify problems with supply chain relationships that are affecting supply chain performance.

Identify improvement initiatives

Analyse the different supply chain trade-offs.

Identify process improvements.

Identify improvements in the supply chain.

Map the 'to be' supply chain and its processes.

Assess the cost benefits and risks of introducing the improvements.

Prepare financial evaluations to justify proposed changes.





Present and gain agreement to improvement proposals.

Introduce supply chain improvements

Devise an implementation plan to achieve supply chain improvements. Seek the commitment of others for implementing the improvements. Identify how to improve relationships that will improve supply chain performance.

QUALIFICATIONS

Post Secondary education plus Transportation or Logistics Certificate

Strong proficiency in Excel, PowerPoint, transportation software.

Experience in developing purchasing and supply related strategies and plans and their implementation at operational level.

Experience in emergency relief work in the field, including ability to work in harsh often stressful conditions, often in remote areas

Experienced in project management and change management

Experience working in different cultural contexts

Fluent communication skills in English and French

Ability to travel at short notice for up to 2 weeks at a time, or up to 4 weeks for emergency interventions

A firm base and understanding of development and humanitarian issues and commitment to this work

7-10 years experience in transportation, purchasing, logistics, warehousing, fleet management, or importing and exporting

Experience in management of budgets and ability to prepare timely, complete and accurate reports.





14. Appendix VIII – Composition of Team

The development and recommendation of the UNHCR Project is managed by a global team of individuals with extensive experience in humanitarian supply chain management, procurement process, network strategy development and business process re-engineering.

Mitsuko Mizushima, Chief Logistics Officer, Fritz Institute (USA)

Mitsuko "Mich" Mizushima has lead global teams and a multitude of projects in logistics and supply chain management for over 20 years. This expertise expands Fritz Institute's capability to provide best practices from private sector logistics to support the operations of its partners in the humanitarian relief community. She has led the creation of both traditional and online supply chain organizations, processes and services. Ms. Mizushima headed APL Business Logistics Services (BLS), a process-driven organization that uses proven, state-of-the art technology and methodology to deliver supply chain solutions to global clients. She also served as CEO of an Internet start-up company that provides supply chain management services over the web. Her BA is from University of Hawaii and MBA from Pepperdine University.

Jane Coyne, Project Manager, Fritz Institute

Jane has a unique combination of supply chain management and humanitarian experience. For the last 4 years, she has worked in the field for Médecins Sans Frontières (MSF) as a Logistician, Logistics Coordinator and most recently as the Head of Mission. In addition, she worked for 3 months at the MSF logistics' facility in Merignac, France. Prior to MSF, Jane spent 15 years working as a project manager solving supply chain problems. She started as a line manager in a production environment and then worked as an analyst for the consulting firm PRTM. Her BS in Economics is from Cornell University and her Masters in Manufacturing Management (MBA + MEng) is from The Kellogg School at Northwestern University. After graduate school, she worked for 4 years at Hewlett Packard managing inventory reduction and production start-up projects in the US and overseas. This was followed by 4 years of independent supply chain consulting for clients such as Nike, Hewlett Packard, SanDisk and Carrier Corporation.

Languages: English (mother tongue) good understanding of French.

Dr. Sander de Leeuw, Assistant Professor of Logistics, Vrije Universiteit, Amsterdam

Sander is an assistant professor at VU University Amsterdam specializing in Supply Chain Management. He has over fifteen years of teaching and consulting experience in this area. His research specializes in supply chain management for the humanitarian sector and in performance measurement in (humanitarian) supply chains. In addition, Sander has overseen several masters thesis projects in this area and is currently overseeing a PhD research project in humanitarian supply chain management at VU University Amsterdam.

Prior to his academic activities, Sander has worked as a consultant at KPMG amongst projects and he is still active as an independent consultant in supply chain management. He has been active in developing and teaching academic courses in





the Netherlands, USA, Uganda and South Africa. Both his MSc and PhD in Industrial Engineering/Management Science are from Eindhoven University (the Netherlands).

Dr. Laura Kopczak, Adjunct Professor of Logistics. MIT/Zaragoza Masters in Logistics Program

Laura Angela Rock Kopczak is a researcher and educator specializing in Supply Chain Management, a field of business in which she has over twenty years of teaching, consulting and industry experience. Her current focus is on SCM for the humanitarian sector and health care logistics for low income countries. She has written several articles and teaching cases in this area, has overseen five Masters Thesis projects and has worked with organizations such as IFRC, Save the Children, PSI, JSI, and Fritz Institute.

Until recently, she worked as a professor at Stanford University and as one of three co-directors of the Stanford Global Supply Chain Management Forum. Dr. Kopczak has lived overseas in Japan and France and has taught courses on Supply Chain Management in Switzerland, the Netherlands, and Hong Kong. Previous to pursuing an academic career, she worked for ten years at Hewlett-Packard Company in a variety of individual and management positions. Dr. Kopczak had a PhD in Industrial Engineering and Engineering Management from Stanford University.

Jessica McCoy, PhD Student, Stanford University

Jessica McCoy has an M.S. in Industrial & Systems Engineering from North Carolina State University where her thesis was "The Impact of Internet Disruption to an Information-Sharing Supply Chain." She is currently a second-year PhD student in Management Science & Engineering, pursuing research in humanitarian logistics. To that end, she has worked with a team at Stanford University to develop a position paper on crisis response models and has written a review paper of current humanitarian logistics models.