Stockholm Evaluation Unit

OCB EBOLA REVIEW

Part 5: Supply functioning

[December 2015]

This publication was produced as part of a broader review on OCBs response to the Ebola emergency. It was prepared independently by Francois Mounis.

CONTENTS

Front Cover Photo by Yann Libessart/MSF:

"*MSF runs an Ebola Management Centre inside Donka Hospital in Conakry, Guinea*"

ACRONYMS

ESC	European Supply Centre
E2E	End to End (supply chain project)
HR	Human Resources
IMC	International Medical Corps
MSF	Médecins Sans Frontières
OC	Operational Centre
OCA	Operational Centre Amsterdam
OCB	Operational Centre Brussels
OCBA	Operational Centre Barcelona
PPE	Personal Protective Equipment
SLA	Service Level Agreement
ToR	Terms of Reference
WFP	World Food Programme
UNHAS	United Nations Humanitarian Air Service

EXECUTIVE SUMMARY

FINDINGS

First and foremost, feedback regarding the supply performance and organisational model in place during this Ebola response was very positive. The lead of one Operational Centre (OC) and one supply unit was perceived as an added value, despite some suggested adjustments. The deployment of specialised staff dedicated to supply management was a key success factor.

The Ebola task force integrating a supply representative smoothened the information flow between MSF supply, coordinators and operations. With the gathering of all information, the forecast was effective in Brussels. While knowledge of the supply chain project was good in Brussels, the field supply staff familiarity with the supply chain project was limited, and they had little overview of the upstream flow. The use of existing standardised procedures was poor, and the standard IT tools were rarely used.

Because of the specific volatility and lack of predictability in this operation, the focus was often on the operational response. The strategic analysis and implementation of medium-term setup, procedures and tools could not be realised. This emergency modus operandi over a one-year period, combined with the high turnover of staff and ever-changing procedures and tools, made the training of national staff challenging and poor.

By mid-2014, it became clear that with the rising demand, supply from manufacturers was lacking specific protective items. In September 2014, MSF Supply and Operational Centre Brussels (OCB) operation management committed 12 million euros to secure Personal Protective Equipment (PPE) supply until June 2015. This decision was based on a reasonable projection of cases until June 2015. In the last term of 2015 there were still over 2 million euros worth of PPE in stock. Considering the 2014 monthly consumption and the projected needs in 2015, the end result is reasonable compared to the risk OCB would have faced with a supply breakdown.

Because of its recognised experience in dealing with Ebola, MSF became one of the major references for setting technical standards regarding PPE. With the call for other actors to intervene, their supply also became a necessity. 1.5 million euros worth of PPE was supplied to third parties (e.g. French Red Cross, International Medical Corps (IMC), Save the Children etc.

Over the one-year period, technical standards had to be adapted to satisfy the increasing demand and to integrate the feedback from the field users regarding PPE safety and comfort. Because of the difference in specifications, new item codes were created and along with it a new source of confusion for the stock managers. Other side effects included distrust regarding safety of new standards and unexpected consumption of new standards. Some changes made to PPE led to specific MSF standards which were unique and incompatible with the market standards.

With the growing demand from the field and external actors during the second semester, MSF supply had to adapt its response capacity. To prevent limitation of operational response due to supply constraints, MSF Supply and OCB management decided to reduce field demand by 10% and increase MSF Supply's capacity by 15%. The supply for mainly OCA programs was redirected to MSF Logistique for the first quarter of 2015, but OCB did not choose to make use of additional means available in the MSF movement.

While the global negotiation and contracting through a centralised channel during the first phase of the emergency was supported by other supply units, questions were raised concerning the supplier monopoly and channelling of goods. An estimated 90% was expected to be delivered within 24 hours.

Low levels of control and procedures over a long period in time increased the risk of fraud in countries where it is common.

Air assets coordination and international air shipping shared by the three countries and different OCs were an efficient model of collaboration. Besides the use of commercial transport, OCB largely used the UN's transport assets (World Food Programme (WFP) trucks and United Nations Humanitarian Air Service (UNHAS) flights).

CONCLUSIONS

Despite unique circumstances, this emergency was a good practical test to validate the concept of the 'End to End (E2E)' project. Even when tension arose regarding the regular supply for other missions, monitoring tools (KPI) and the Service Level Agreement (SLA) were in place to measure and open a dialogue between MSF Supply and OCB management to maintain an acceptable service level with revised objectives and budget. The project was well implemented and structured in Brussels. However, important gaps existed between the two ends in project awareness and understanding, visibility on the supply chain, procedures, and tools implementation.

Globally, the supply response midway through the E2E project demonstrates that the organisational changes already made in OCB's supply activity have been successful and are on the right track, but need to focus more on management at the receiving end.

Regarding the organisational structure, the lead of one OC and its supply unit has proven to be useful in channelling all information to and from the three countries, but also for making the right operational decisions to manage this Ebola response. It was a courageous step to commit 12 million euros to secure the production of PPE. Although a PPE stock worth 2 million euros is left over, this result is reasonable compared to the risk OCB would have faced with a supply breakdown.

At strategic level, the organisation should have phased out the emergency modus operandi after the first months and adopted more appropriate long term management tools and strategy.

The minimal use of MSF corporate supply capacities to support the regular missions highlights a lack of spontaneous corporate vision.

In anticipation of future epidemics, a planned collaboration with other actors to identify and validate alternative sources may be a way to sort out the monopoly issue.

RECOMMENDATIONS

⇒ Extend the knowledge and awareness about E2E project at field level

⇒ Develop emergency procedures that could be used during emergency phase

⇒ Implement the use of a standard Excel table as temporary order management and inventory tools during emergency phase

⇒ Define and implement a rational system to automatically mobilise international supply capacities to manage overload

⇒ Collaborate with other actors to identify and validate alternative supply sources

BACKGROUND

OCB's response to the Ebola outbreak in Western Africa has undoubtedly been complex and challenging. Questions have come up also whether the choices made were timely and right. This is why the OCB management has commissioned an extensive multi-sectorial review of the intervention.

The review looks at the time period from the 1st March 2014 to 31st March 2015. It identifies key learning areas based on examples of good and bad practice as well as make recommendations for possible future best practices which can potentially improve guidelines, departmental strategies and learning for future similar interventions.

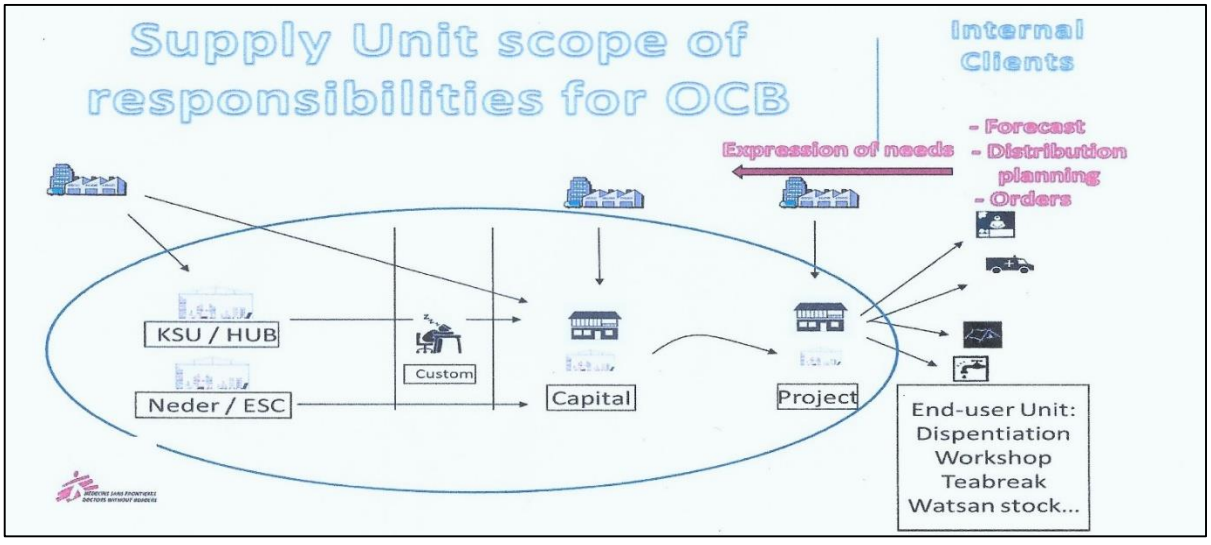
A summary report that highlights main findings from the 9 reviews is available.

INTRODUCTION

After the Haiti operation and review[1] in 2010 revealed the existing MSF supply setup's limitations, MSF Belgium and MSF Supply have done a thorough analysis of their global supply organisational setup and proposed a large reorganisation to prevent supply from further limiting operational response in regular missions and emergencies.

The main recommendations regarding Operational Centre Brussels (OCB) supply structures and organisation were integrated into the five-year End to End (E2E) project launched in 2012. In short, the main change is that the new supply unit's scope of responsibility[2] is extended from "end to end", including information and physical flows from origin (supplier) to field project stock and supply HR management. It has enabled OCB to consolidate and monitor the global supply chain costs and flows.

Figure 1: Step-by-step visualisation of the End to End (E2E) supply process.



[1] Haiti Earthquake Inter section Review – MSF - 2010

[2] Médecins Sans Frontières – Supply Unit 'Mission/stratégie et Objectifs à 3 ans'

EVALUATION METHODS & LIMITATIONS

The supply review is based mainly on qualitative methodology. It includes a review and analysis of E2E and MSF Supply documents and interviews with team and management members at HQ level, supply staff present in the three countries during the defined period, representatives from non-governmental organisations (NGOs), as well as staff from other OCs and supply units. A short questionnaire focusing on the field perspective was also sent to 12 field supply managers working at the time of writing on other missions, but only one response was received.

Because most of the international supply staffs involved were already working in other countries, field visits were not considered a priority for the supply part of this review. The feedback from field management was collected by the medical review team.

The comparison of data from Haiti and Ebola was not relevant as a large portion of the supply data for Haiti was missing (because it was delivered directly from suppliers for instance, and did not physically pass through the ESC, e. g. container hospital, ringer lactate for cholera epidemic).

FINDINGS

First and foremost, feedback was systematically positive regarding the supply performance and the organisational model in place during this Ebola response. Although the production capacities of Personal Protection Equipment (PPE) were lower than the demand, no essential supply break down was reported. The feedback collected from medical staff and management through field interviews was consistent: supply was not an issue.

As part of the lessons learnt, we shall hereafter list the identified success factors as well as what can be improved in future. However, one should bear in mind that this Ebola operation was unique in several respects. For instance, the operation had to be managed in three different countries and for 5 different OCs, in a highly volatile situation in which it was extremely difficult to make predictions and plan for future events.

The other specificity regarding the supply was the limited number of items to be managed with scrutiny by European Supply Centres (ESC). The focus and the challenge was mainly around 40 PPE items, as opposed to hundreds of medical items like usual.

LEAD: ONE OPERATIONAL CENTRE, ONE SUPPLY UNIT

Because of its past involvement in managing Ebola epidemics, OCB and MSF Supply took the lead in managing, coordinating and supplying the Ebola operation in the three countries. This model of having one OC and one supply unit in the lead is an organisational model that has been perceived as an added value by all field users and other MSF partners involved in supply, even if some improvements are suggested.

SUPPLY SPECIALISED HR, AN ASSET

Within the framework of this E2E strategy, the deployment of specialised staff dedicated to supply management all along the chain ('end-to-end') was a key success factor during this emergency response. Supply coordinating positions were deployed in the three countries and supported by supply managers in the main locations. Due to the high turnover of staff, it was challenging for supply as well as for other specialists to fulfil those positions. However, the integration of supply HR management within the supply chain unit has provided more flexibility to fulfil field positions with HQ staff when required. It also created mutual learning opportunities as supply staffs were confronted with field realities, and HQ supply constraints were better understood in the field.

Because of the size and the duration of the operation, large HR capacities were drained by the Ebola response and it became challenging for other missions to obtain supply resources as needed.

EBOLA TASK FORCE ORGANISATIONAL MODEL

Together with the specialised HR that was an asset in the field, the other successful organisational factor was the Ebola task force created in OCB, where supply was represented.

Besides the coordination role of Ebola response, this interface between the field missions and the operations also gathered and processed all information regarding needs and supply. This integration of dedicated supply staff within the Ebola task force smoothened the information flow between MSF supply, supply coordinators and operations. The solid understanding of manufacturing constraints has

facilitated the management of field orders and external demands. With a good overview of the stock availability and incoming deliveries, priorities could be set, stock could be transferred and deliveries could be split according to requirements, avoiding supply breakdowns. At that end, knowledge of the supply chain project and supply chain management was good.

On the other hand, at the bottom end of the chain, the field supply staff's familiarity with the supply chain project was limited.

TOOLS AND PROCEDURES

As is common during emergency phases (which usually last one to three months), operational staff often worked reactively more than proactively, and implementing tools and procedures were not the first priority. However, the 12-month duration of this emergency made the lack of procedures and standard tools a problem.

Guidelines and procedures: The existing manual and procedures were either ignored or described as too heavy (several hundred pages which were not even read) by the supply staff, including by those in coordination positions. Instead, staff applied procedures according to their understanding or past experiences (e.g. transposing their South Sudan procedures in Liberia[3]). Although this situation may have been manageable for a few weeks, it became more complicated to manage for a period of 12 months.

Tools: The standard IT tools to manage field orders, purchases and stocks were not used or only partially used (in Liberia, Logistics 7 Purchase module was used for a few months). 'Logistics' and 'Unifield' IT tools are perceived by supply staff as far too heavy for emergencies. The very basic Excel tool 'Easy stock' was not used either. Each incoming staff member systematically created his/her own Excel tables and filed the tools used by the outgoing supply person. This lack of historical data and low levels of controls and procedure increased the exposure to corruption in countries where it is common practice (e.g. in Monrovia national supply staffs were dismissed because of fraud).

A LONG-TERM EMERGENCY MODUS OPERANDI

Because of the specific volatility and lack of predictability in this operation, the focus was often on day-to-day operational response. Management of operations was excellent. However strategic analysis and the implementation of medium term setup, procedures and tools could not be realised. The modus operandi remained reactive rather than proactive.

This situation over a one-year period, combined with the high turnover of international staff and ever-changing procedures and tools, made the training of national staff challenging and poor. The lack of training made it difficult in the field to manage tasks (inventory management) which are usually well managed by nationals.

SECURING SUPPLY WHEN DEMAND IS HIGHER THAN PRODUCTION CAPACITY

As indicative figures, 400 000 pairs of gloves and 120 000 overalls, hoods and masks were required every month[4].

[3] Supply Guideline Liberia Ebola Mission

[4] Industry Consultation : Personal Protective Equipment needs in Ebola Response November 2014

The previous Ebola outbreaks were managed by MSF with Ebola kits and regular supply. This time, with hundreds of cases in different countries, not only were the contingency stocks insufficient, but by mid-2014 it became clear that supply from manufacturers was lacking specific protective items. The nature of Ebola would make a breakdown in PPE supply disastrous.

In August-September 2014, many organisations approached MSF suppliers with the aim of obtaining protective equipment. With demand from all types of customers increasing, OCB had to first secure supply for its own staff currently working in the field. In September 2014, a production plan was established with the validated manufacturers, and MSF Supply and OCB Operation Directorate committed 12 million euros to secure PPE until June 2015[5]. This decision was based on a reasonable projection of 800 beds up to 1 000 beds until January 2015, decreasing by 100 per month from February to June 2015. This was a key decision for the success of the MSF Ebola response.

Figure 2: Different parts of the PPE.

[5] 'Engagement financier achats MSF Supply pour couvrir besoins critiques Ebola'

SETTING UP TECHNICAL STANDARDS AND PROTOCOLS, TRAINING AND SUPPLYING OTHER ACTORS

Because of its recognised experience in dealing with Ebola, MSF rapidly became one of the major references for setting the technical standards regarding PPE.

As MSF called for other actors to intervene in the field, supply also became a necessity for some of them. MSF had to provide technical standards as well as protocols, training, and PPE.

Increasing media pressure and the arrival of Ebola cases in Western countries resulted in immense demand from operational and non-operational actors (UN but also donors alone were seeking for hundreds of thousands of PEE). The market was not ready to respond to such demand, especially the small supplier market that meets MSFs technical standards.

In addition, MSF had to provide support to other organisations and structures (International Medical Corps (IMC), Center for Disease Control and Prevention (CDC), International Federation of Red Cross and Red Crescent Societies (IFRC), French Red Cross, Belgian hospitals, etc.). A meeting[6] was organised in Copenhagen in November 2014 to coordinate with all other interested actors and to present the MSF action, standards and supply constraints.

FORECASTING THE NEEDS

As all information converged toward the Ebola task force, the forecast was effective in Brussels. Supplier capacity and delivery plan, MSF Supply stocks and shipping schedule, field orders and field inventories, and external requests were gathered to fix priorities and split orders according to manufacturers' delivery plans. At the Brussels end, the supply chain overview was rather good even if the field inventory figures provided were not always reliable.

The supply staff in the Ebola Task Force regularly shared the forecast with the different capital coordination teams, enabling the supply coordinator to manage the stocks according to incoming deliveries.

Downstream, the stock managers regularly reported their inventories to the capital, but they had little or no overview of the upstream flows.

The field figures were not always as reliable as they should have been. This was mainly because they could not manage the multiple (and changing) codes supplied for one item. They did not seem to purposefully underestimate their stocks to build up contingency, as it was sometimes believed in Brussels. Supply staff in each country reported unanimously that code changes were a flawed implementation *(e.g. field location ordering protective gloves A received gloves A but also gloves B and gloves C. All gloves B and gloves C were equivalent, but with the poor training of staff this created a lot of confusion regarding orders and stock management.)*

The calculation method for the stock replenishment was different in OCA (where it was based on number of entries/day) and OCB (where it was based on the number of beds). Whichever method is used, it is important to have one standardised calculation across all sections.

[6] Industry Consultation: personal protective equipment needs in Ebola response – November 2014

ADAPTING THE STANDARDS AND INNOVATIONS

Over this one-year period, the technical standards of PPE had to be adapted mainly for two reasons:

- Alternative sources of supply (equivalent but not always similar) had to be found to satisfy the demand.
- Improving the equipment as field users were providing feedback (safety and comfort).

Here again, the task force played a strong role in processing these changes. To remain flexible, the MSF international validation process of standard items was bypassed for the PPE items. Technicians, medical and MSF Supply purchasers worked together to validate new standards and alternative sources. This, however, created some tension as Amsterdam Procurement Unit felt that they had to manage technical specifications imposed by MSF Supply and OCB.

Because of the differences in specifications, new item codes were created (e.g. a new source of protective glove with different colour and slightly different specifications was generating a new code, and along with it a new source of confusion for the field stock managers).

Another side effect of the changes in PPE was the distrust regarding safety of new standards. For example, although they were validated, new gloves with new colours generated doubts about their quality and unexpected behaviour, like using two pairs of the new standard instead of one. Here again, discrepancies between average and effective consumption arose. The changes were also unexpected in the field and perceived as a top-down provision of substitute items without information reaching the receiving end.

The changes of specifications upon field recommendation sometimes led to the creation of MSF standards (e.g. overalls) which became unique on the commercial market. Since they were modified and manufactured specifically for MSF, they could not be returned to the manufacturer as they were no longer compatible with the commercial market.

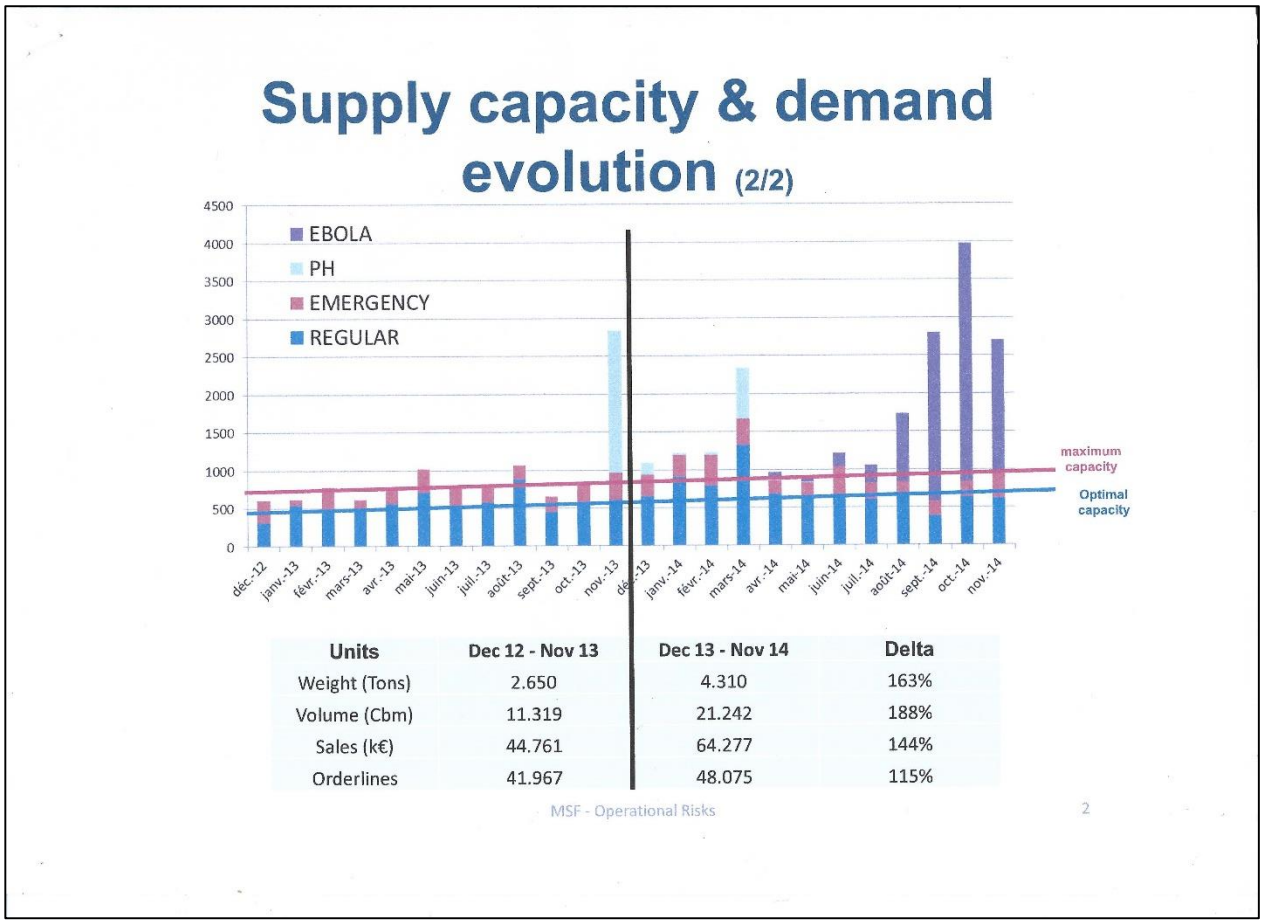
In some other cases, the changes were implemented directly in the field. The 'rapid response teams' in Guinea were also called 'rapid change teams' as they were learning from daily experiences and requesting changes to be made to their equipment and kits for the day after. These service requests were not always possible. Technicians in the field sometimes have limited awareness of the long chain of processes induced by a technical change.

EUROPEAN SUPPLY CENTRE RESPONSE CAPACITY AND DEMAND EVOLUTION

Because of the growing demand from the field but also from external actors, it became clear during the second semester of 2014 that MSF Supply had to adapt its response capacity. MSF Supply's[7] optimal capacity is built to run at 80% to cover regular demand and emergencies (indicative figures 300 MT/1 200 m3/month). The remaining 20% of capacity is to absorb unusual emergency peaks.

[7] Supply Capacity presentation – MSF Supply

Figure 3. Supply capacity and demand evolution from December 2012 to November 2014.



During the last five months of 2014, the demand was continuously 100% or over the maximum capacity (indicative figures 520 MT/2 800 m3/month). Although MSF Supply was fortunate that other emergencies were largely supplied locally, the risk of again facing a strong limitation of operational response due to supply constraints could not be ignored. To prevent further restraints and delays, proposals were made to OCB management and the following decisions were taken:

- to decrease the demand of 10% from regular projects over the first and second term 2015.
- to increase MSF Supply capacity of 15% on the top of the 5% natural and projected growth (the 2015 budget of 9 736K would be increased to 10 530K; the 2016 projected budget of 10 288K would be increased to 11 159K; and the 2017 budget would remain as projected at 10 931K).

SUPPLY UNIT PERFORMANCE IMPACT

The lead time monitoring of MSF Supply[8] illustrates the impact of this operation on its global performances during the second half of 2014. Below is a table with the percentage of 'on time' supply for regular and emergency orders, illustrating the pressure upon the supply chain system during that crisis.

[8] KPI MSF Supply / OCB Supply Unit 3rd, 4th quarters 2014

MSF Supply 2014 Lead time: % on time							
	Target	July 2014	August 2014	September 2014	October 2014	November 2014	December 2014
Regular orders	80 %	67.2 %	53.1 %	73.4 %	64.8 %	61.5 %	59.9 %
Emergency orders	80 %	94.4 %	84 %	72.5 %	74 %	67 %	66.3 %

These figures are confirming the feedback from MSF Supply partners (OCA Supply Unit, Operational Centre Barcelona (OCBA) Supply, and MSF Logistique).

OCA expressed a perception of 'bottleneck' and 'loss of control' towards the end of 2014, when OCBA expressed concerns about 'systematic slow-down to respond to other emergencies over a one-year period'.

Another systematic concern regarding indirect impact expressed by other OCs and missions was the difficulty of being supplied with items (such as gloves) used in PPE as well as in other contexts where they were needed. Generally, however, the impact on other field missions was low and well accepted.

USE OF LOCAL RESOURCES

Although supply staffs in the field were cautious so as not to overly disrupt the local market, a large part of their activities in the field were related to local purchases. Construction activities and maintenance of the Ebola Treatment Centres (ETCs) were relying on the supply department to manage their activities. The purchases were mainly related to construction material, food and clothing for patients, as well as all maintenance equipment for the different structures.

An estimated 90% of the order lines were purchased locally, and an estimated 90% were expected to be delivered on the same day or within 24 hours.

Because of the high turnover, it took some time to build up local standard lists of those local items (local food items and local clothes) to ease, speed up and monitor the purchasing process.

USE OF MSF MOVEMENT SUPPLY CAPACITIES

There was only one change in the MSF movements supply agreement made due to the Ebola response: OCA regular supply which is usually split between MSF Supply and MSF Logistique was 100% diverted to MSF Logistique for the first quarter of 2015. Otherwise, OCB did not choose to make use of additional means available in the MSF movement to enhance and secure its response capacity. Diverting regular supply to another structure is easier if it is prepared, and currently there is no such mechanism in the MSF movement. It is worth noting that toward the last term of 2014, MSF Logistique did offer its (short term) support to MSF Supply, and that this opportunity was not used by OCB. It is surprising that regular field regular programmes would be asked to delay or decrease their supply orders by 10% without having considered alternative options. The other supply units were not significantly impacted by the Ebola response, and were below their maximum capacity in 2014.

MSF MOVEMENT SUPPLY COORDINATION

Purchasing PPE items: the negotiation and contracting through a centralised channel during the first emergency phase was supported by other supply units. However, questions were raised regarding the benefit of keeping a unique downstream shipping channel through Brussels for all PPE items in the long term. There are also diverging views with OCA Procurement Unit concerning the suppliers' monopoly once technical standards are defined.

International air shipping: the regular weekly charter shared by the three countries and different OCs was an efficient model of collaboration and provided good flexibility to the field. The air shipping of 75 000 prevention and disinfection kits to Liberia provided reactive response to Liberia's operational needs.

Air assets coordination: aircraft and regional helicopter management was also an efficient way to consolidate the needs and decrease global costs.

Local coordination: on ad-hoc and voluntary basis, supply staff often found ways to work together. But unnecessary duplication were existing like import formalities that were not always carried out by one supply representative for all MSF communities when it could have easily been done.

Tactical transport: Besides the use of commercial transport, OCB largely used the UN transport assets (WFP trucks and UNHAS flights).

PERCEPTION OF THIRD PARTY ORGANISATIONS SUPPLIED BY MSF

Besides the donations made to other organisations or structures in the field, MSF Supply provided over 1.5 million euros worth of PPE to third parties *(e.g. the French Red Cross, IMC, Save the Children etc.).*

The collaboration with MSF as a supplier was perceived as very good. The quality, communication and reliability were qualified as positive and professional. External actors note that all information regarding order processing was meant for internal MSF use. They recommend MSF Supply to produce a small web-based instructional document for external customers to explain how to proceed with MSF supply administration and order processing. Some administrative difficulties were faced in reconciling invoices and back orders with extranet data.

The perspective on MSF securing the market and production of PPE varied by organisation and position. It was not an issue for some people, while others felt that it was an imposed monopoly. The procurement departments were open as much as they could get what they were looking for, but to make it work it was essential for MSF to respect the delivery schedule as contracted. Once those organisations were using MSF protocols and attending MSF training, providing the corresponding PPE was rather logical. For the French Red Cross, support at all levels was received successfully and with gratitude.

Unlike Amsterdam Procurement Unit (APU), IMC could search the market and find alternative source of PPE in China. However, access to the MSF validation process and laboratory would be very much appreciated and might enable to widen this niche market.

OVERSTOCKS AND RETURNING GOODS TO EUROPE

As the peak of the epidemics subsided more quickly than projected, in the last semester of 2015 there were still over 2 million euros worth of PPE in stock, out of which one item (coverall) was representing 1.8 million euros. Considering the monthly consumption in 2014 and the projected needs until mid-2015, the end result is reasonable compared to the risk OCB would have faced with a supply breakdown. A decision was taken to commit 12 million Euro to secure the production of PPE, which was considered an appropriate strategic choice and a risk worth taking.

Some overstock items and kits were returned to MSF Supply in Brussels. This return logistical process is always difficult and generally only used for high-value assets (i.e. hospital structures, trucks, etc.). The other low-value items are usually donated locally to third parties. Returning humanitarian aid is often negatively perceived by national authorities and the local population, and could easily jeopardise the image of the organisation and even the security of the team. At MSF supply in Brussels it meant a specific and time-consuming process to control and repack all goods received.

At the field level, the re-exportation of goods was decided once the supply staff had already left the mission and there was no more knowledge regarding how to process an export. Technical guidelines to help untrained staff process exports would have been appreciated, but organising re-exports with competent staff to manage would be the best option.

PREVENTION AND DISINFECTION KITS

This topic is further developed in the Logistics section of the review.

After discussion on the pros and cons of the concept, the decision to use this strategy was taken by the management (operations and logistics) in the field, and 70 000 kits were ordered to MSF Supply for Monrovia.

The kit content and packing was created in Brussels under high time pressure to order, assemble, pack and ship the kit component. Because of IATA regulation, chlorine tablets had to be packed separately from the kit. Although this kit contained one plastic bucket with lid, it was decided to pack the kit in one cardboard box with chlorine tablets aside.

At the receiving end, the kit design was perceived as 'imperfect' and 'inappropriately packed'. The supply team was asked to repack the 70 000 kits in Monrovia and to put the whole content with leaflet inside the plastic bucket itself. Although the kit was welcomed and accepted as a good idea for programmes, the communication concerning the kit could have been better.

In Guinea, the mission received a few thousand kits in bulk. The components were moved from warehouse to warehouse and were not distributed. The individual item components were mostly handed over to third parties and some distributed to the staff.

CONCLUSIONS

Despite unique circumstances, this emergency was a good practical test to validate the concept of the End to End project, and compare the changes between 2010 and 2014 supply capacities in a large-scale emergency.

The first obvious difference is the very positive perception of supply department performance during this operation. The supply during the Ebola response was “not an issue” and the service provided was unanimously appreciated by operations and other actors. The second change and main success factor is the human resources, which are now managed all along the chain by the supply department.

The third difference is that when tension started to arise on the regular but emergency supply of other missions, monitoring tools (Key Performance Indicators) and Service Level Agreement were there to measure and open a dialogue between MSF Supply and OCB management to maintain an acceptable service level with revised objectives and budget.

The E2E project was well implemented, structured and understood in Brussels. The performance measures illustrate the difference. However, important gaps exist between the two ends: in project awareness and understanding, visibility on the chain, procedures, follow-up and tools implementation.

Globally, the supply response midway through the E2E project demonstrates that the organisational changes already made in OCB’s supply activity have been successful and are on the right track, but need to focus more on the management on the receiving end.

Regarding the organisational structure, the lead of one OC and its supply unit has proved to be useful in channelling all information to and from the three countries, but also for making the right operational decisions to manage this Ebola response.

It was a courageous step to commit 12 million euros to secure the production of PPE. Even if a PPE stock worth 2 million euros is left over, this result is reasonable compared to the risk OCB would have faced with a supply breakdown.

Missing on a strategic level was a way of helping the organisation get out of the emergency modus operandi after the first few weeks and adopt more appropriate management tools.

Although MSF supply adapted its structure to the needs of OCB, the minimal use of MSF corporate supply capacities to support the regular missions highlights a lack of spontaneous corporate vision. This occurred even more as field missions were asked to delay or decrease their supply orders by 10% without having considered alternative options.

A wrap-up exercise with the different OCs' supply units might be useful to discover better solutions for the future regarding the management of the flow from manufacturing sites, items coding, alternative sourcing, etc.

RECOMMENDATIONS

"If one does not know where s/he is going, there is very little chance for him or her to arrive there".

If a strong focus was successfully put on the Brussels end over the last three years, a similar investment could be designed and generalized for the management of emergencies in the field. A particular focus should be put on the integration of national and international staff working at the bottom end of the chain into the E2E project.

⇒ Extend the knowledge and awareness about E2E project at field level

Considering the level of adherence to and use of existing procedures, a global review of supply procedures needs to be considered. After the in-depth reorganisation of the supply structure, an updated and shortened version of field procedures is necessary.
To produce a specific procedure manual for emergencies is often counterproductive because it also needs to be maintained, and may be viewed simply as additional procedures. It is recommended to create a short document listing the procedures which are suspended during a period of time (one to three months), with revised financial thresholds and rights of signature that are adapted to emergencies.
This would be coherent with the global system and well accepted by the field users (because of fewer procedures). It would also provide good support for auditors after emergencies. Moreover, such emergency procedures could easily be integrated in the training.

⇒ Develop emergency procedures that could be used during emergency phase

To avoid reinventing tools with each turnover of staff, the mandatory use of a standardised (if imperfect) Excel tool would ease the training of national staff, keep data history and support supply activities. Easy stock is already used 'in house' by other departments and might be considered.

⇒ Implement the use of a standard Excel table as temporary order management and inventory tools during emergency phase

MSF has a large supply capacity at corporate level compared to most humanitarian organisations. This capacity should be used to enable rapid response and manage temporary peaks of activities. Discussion should take place at supply department level to define a system diverting demand where it could be treated, which could be activated easily and transparent to users.

⇒ Define and implement a rational system to automatically mobilise international supply capacities to manage overload

MSF went unusually far in its cooperation with other actors, by not only training them but also supplying them with the necessary equipment. This added another burden on the existing challenge of managing MSF's own PPE supply. In the anticipation of future epidemics, a planned collaboration with other actors to identify and validate alternative sources might be a way to sort out the monopoly issue.

⇒ Collaborate with other actors to identify and validate alternative supply sources

ANNEXES

ANNEX I: TERMS OF REFERENCE

http://cdn.evaluation.msf.org/sites/evaluation/files/attachments/supply.pdf

ANNEX II: LIST OF INTERVIEWEES

[First name Last name, Title]	[Function]
Erland Egiziano	Director General, MSF Logistique
Katia Barthaud	Head of Purchasing and Technique, MSF
Philippe Cachet	Deputy Director, MSF Logistique
Juan Crespo	Directeur Achats et Responsable Technique,
Romain Mirale	Supply Emergency Unit, OC Barcelona
Patricia Fernández Wyss	Supply Chain Co, OC Barcelona
Christian Pobloth	Field Support Officer Emergency Desk, OC
Paul Verth	Sierra Leone Logistics Co, OC Amsterdam
Roel Zaat	Procurement Unit Co, OC Amsterdam
Christophe Leruth	Guinea Supply Co, OC Brussels
Sarah Mordret	Supply Ebola Task Force, OC Brussels
Johanna Linder	Liberia Supply Co, OC Brussels
Mariannick Bossut	Guinea Supply Co, OC Brussels
Jungsil Song	Liberia Supply Co, OC Brussels
Elise Louvet	Guinea Supply Manager and Supply Co, OC
Julie Grundberg	Sierra Leone Supply Manager, OC Brussels
Brent Turner	Guinea Supply Manager, OC Brussels
Stephanie Marheux	Supply Ebola Task Force, OC Brussels
Thierry Boucher	Log Supply Emergency Support, OC Brussels
Nicolas Dupont	Purchasing Director, MSF Supply
Stefaan Phlips	Site Director, MSF Supply
William Vannier	Supply Chain Director, MSF Supply
Rosa Crestani	Emergency Coordinator, OC Brussels (Ebola
Vianney Prouvost	Responsable Logistique et Achats International,
Nikola Usenovic	Procurement Manager, International Medical
Zlata	Ebola Response Procurement Officer,

ANNEX III: INFORMATION SOURCES

Haiti Earthquake Inter section Review 2010 (Logistics and Supply)
KPI MSF Supply OCB Supply Unit 1st Quarter 2015
KPI MSF Supply OCB Supply Unit 1st Quarter 2014
KPI MSF Supply OCB Supply Unit 2nd Quarter 2014
KPI MSF Supply OCB Supply Unit 3rd Quarter 2014
KPI MSF Supply OCB Supply Unit 4th Quarter 2014
HoM (Head of Mission) Week Supply Chain E2E update 2013 with annexes
Steering Committee Board Presentation 2015 Q1
MSF OCB Board presentation on supply excellence
MSF OCB Supply chain presentation 2012
MSF OCB Supply chain presentation 2014
Supply capacity presentation and demand evolution Update January 2015
Médecins Sans Frontières Supply Unit Mission / Stratégie et Objectifs à 3 ans
Supply Guidelines Liberia Ebola Mission October 2014
Hand Over report Supply Co Monrovia October 2014
Engagement financier achats MSF Supply pour couvrir les besoins Ebola (mail)
Industry Consultation Presentation Copenhagen 11/11/14
Policy: Integration of medical stocks management under the supply department OCB – Feb. 2014
Field Supply chain response to Ebola operations and needs - Report of OCB Supply Chain Director
Questionnaire supply set up Guinea OCB Supply Chain Director September 2014
Questionnaire supply set up Sierra Leone OCB Supply Chain Director September 2014
Questionnaire supply set up Liberia OCB Supply Chain Director September 2014

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