Subject/Mission	**Ebola Emergency Response**
Review Sponsor	Brice De Le Vigne (OCB Director of Operations
Review Manager	Sabine Kampmueller- Stockholm Evaluation Unit (SEU)
Review Team Leader	David Curtis- Consultant
Starting Date	01/06/15
Duration of consultant	40 days

Terms of Reference: EMC Design- Log Construction

With support from WatSan and Medical components of the review

REASON FOR THE REVIEW

One year after MSF (OCB) launched its response to the Ebola outbreak in Western Africa, and due to the complexity and challenges that have stretched the organisation, MSF OCB requires an **extensive multi-sectorial** review of its intervention.

The Ebola outbreak in West Africa was first reported in March 2014, and has rapidly become the deadliest occurrence of the disease since its discovery in 1976. In fact, the current epidemic sweeping across the region has now killed more than all other known Ebola outbreaks combined. Up to 7 February, 9,167 people had been reported as having died from the disease in six countries; Liberia, Guinea, Sierra Leone, Nigeria, the US and Mali. The total number of reported cases is more than 22,828 as of February 2015.

As a result of this unprecedented outbreak MSF has custom built Ebola Management Centre's (EMCs) in Guinea, Liberia and Sierra Leone. These EMCs which range from 250 beds to 20 beds were not built on the same principles but were adapted to local realities, adapted to scale and were adapted to gained insight over time. As a result every MSF EMC possess unique attributes, strengths and weaknesses. Much like the Ebola outbreak in West Africa the design of MSF's EMCs evolved over time with the aim of providing better patient care within a resource appropriate setting, while attempting to optimize a safe work environment.

PURPOSE AND SCOPE

The overall objective of the review is to provide: a picture of the intervention through development of the EMC's, a critical analysis of the intervention and choices taken and lastly to capitalise on the information for future use.

This review will look at the time period of 1st March 2014 to 31st May 2015.

The review should focus on the appropriateness of the chosen strategies/approach and provide an analysis of the effectiveness of the intervention. The analysis should identify key learning areas based on examples of potential good practice as well as make recommendations for the future.

The reviews scope is limited to all areas of the intervention under the direct operational management of the participating MSF Operational Centres in the three countries most affected; Guinea, Sierra Leone and Liberia.

The key objective of the evaluation is to conduct a site comparison of the 13 different purpose built MSF EMCs at: **Donka** (80 beds); **Guéckédou** (85 beds; **Kankan** (20 beds); **Monrovia - Elwa 3** (250 bed); **Mancenta** Transit Centre (35 bed); **Foya** (40 bed); **Bo** (100 bed); **Kailahun** (100 bed); **Forecariah** transit centre (10) transit centre to emc; **Magburaka** (100 bed); **Freetown / Prince of Wales** secondary school (100 bed); and **Freetown / Kissy** (75 beds), **Nongo** (72 beds).

The 2008/14 theoretical design from guideline comparison should be used as a reference.

The review will have input from both medical and Watsan consultants attached to the general Ebola Critical Review and should coordinate the review with this in mind.

SPECIFIC EVALUATION TOPICS

1. How did the EMC design, evolve and respond to the operational needs

1. Were the existing guidelines/strategies/protocols suitable for the intervention and did they address the needs? (Appropriateness)
2. What are the main differences (structure, materials, functioning) between the different EMCs and what elements account for these differences? (Appropriateness)
3. How did the EMC designs evolve during the different phases of the outbreak? (Effectiveness)
4. What were the main innovations (e.g. functionality, biosafety, materials, patient comfort and privacy) arising within the evolution or changes in EMC designs? (Appropriateness)
5. Where appropriate and timely adaptations made in response to changes and evolution in the operational environment and if so what were they? (Appropriateness)
6. What were the main factors influencing these changes? (Effectiveness)
7. What were the main opportunities and constraints with the implementation of the EMC design strategies? (Effectiveness)

Specific Questions:

- What were the main challenges for site selection? Including access to water and waste water and site planning? Were there also social and cultural challenges for site selection?
- What elements of Biosecurity of staff and patients (cross-infection) were addressed by EMC design? (with specific attention to triage zones, patient flow, waste flow, material flow and information flow)
- Were there standards of temperature, ventilation, and humidity, lighting and acoustic environment as part of EMC design objectives? What were the challenges in attaining standards?
- How adaptable were the EMC structures to operational needs (timing, ease of expanding / reducing / rearranging the site);
- How were the designs adapted to meet the challenges during the surge phases of the Ebola response? Were the choices appropriate?

- Are there different types of Decommissioning? (E.g. total shut down, handover of EMC structures, return of adapted facilities to original health services, etc.) What components should be included as part of the design process to facilitate decommissioning?
- What are the design implications for rural and urban approaches?
- Were resource requirements different for the different centres? What were these differences and did they have impact on EMC design and vice versa?

2. How did the design of the Ebola Management Centres (EMCs) impact on patient care and staff, patient and visitor flows?

1. How did the EMCs designs impact on patient, staff and visitor flow?; (Impact)
2. What adaptations were made to the design to improve patient, staff and visitor flow? (appropriateness)

Specific Questions:

- How did the space planning design evolve? (e.g. triage area and flows of patients, staff, visitors, waste and information)
- What standards existed for patient and staff comfort; highlighting the functionality of the EMC facility (rest area, patient privacy, visitors, ease of management of activities in a high risk area, exchange of information inside<>outside high risk)? What were the evolutions or changes in these standards during the Outbreak?

EXPECTED USES AND OUTPUTS

- Critical analysis of the strategic choices and decisions
- Critical analysis of the successes at the level of implementation
- Potential areas for learning
- Recommendations for the future best practices where relevant

The review should focus specifically on the areas of the response which challenged MSF to adapt the strategy, develop new solutions or change its way of working. The review is not a classic what was done and what was not done review.

Key to the evaluation is to first define criteria (what should a good EMC do), then compare the different EMC's against those criteria (going into detail on specific solutions and experiments). Based on this, determine what (elements) make a solution best fit for purpose (could be different based on size and location/climate), and define possible development needs.

METHODOLOGY PROPOSED

The review should incorporate a mixed methodology (qualitative and quantitative) based on the MSF guideline for evaluation e.g. based on the objectives of the response and DAC criteria[1].

Will include: review and analysis of key project documents, interviews with team members at HQ and field levels, interviews with local authorities and other organizations, Interviews with patients, surveys, natural group discussions, roundtables, focus groups and lessons learned workshops.

[1] OECD DAC Criteria: Criteria for evaluation development assistance

REQUIREMENT: Log Construction

Expected Background and Experience

The two evaluators should be experienced independent consultants with the following minimum qualifications and experiences:

Profile

- Minimum 5 years of experience in humanitarian and development assistance in the logistics sector,
- Construction background or relevant experience within the sector
- Construction Project management essential
- Knowledge and experience of construction projects in an emergencies
- Experience in conducting logistic or other sector program and project evaluations and / or reviews
- MSF Experience essential
- English and French required

PRACTICAL IMPLEMENTATION OF THE EVALUATION

The number of days identified are for the period between 01/06/15 and 31/10/15. The report writing and triangulation is expected to take place during September and October

Consultant	Log Construction
Timing of the evaluation	Starting June 2015
• **For preparation (Days)**	2 weeks
• **For field visits (Days) Guinea/Sierra Leone**	2 weeks
• **For interviews (Days)**	2 weeks
• **Analysis and Triangulation**	1 week
• **For writing up report (Days)**	1 week
Total time required (Days)	**40 days**