

INTERNATIONAL SEARCH AND RESCUE

Summary Report and Evaluation: Installation of Ebola Treatment Units in Monrovia, Liberia

Project Description

The "Ebola" project emerged as a joint effort with two German¹ and two local partners under the mandate to "hand over of two functional ETUs to a credible local partner". A suitable local partner was found in the Liberian Ministry of Health (MoH), supported in its efforts on-site by GerLib² Clinic personnel. In order to hand over the ETUs, a suitable location had to be agreed on and prepared; sewage, water, and electricity capacities provided



Figure 1. Installed ETU in Liberia, Monrovia.

for. In addition, the humanitarian consignment had to be delivered through customs and to the determined location. All logistic and coordinative preparations had to first be settled, so that the ETUs could be erected, equipped, and operations herein started.

Responsibilities of I.S.A.R. Germany

I.S.A.R. Germany's responsibilities lay in these logistic and coordinative preparations. Starting from meetings at the MoH office, with the Health Cluster, ELWA staff, and UNDAC to the full preparation of the ETU grounds, the three-man team established a functional site for the ETUs. The first meetings and discussions involved the decision on where to situate the ETUs. The GerLib staff had already positioned the request, so that final agreements were to be made. The decision fell on the <u>ELWA 2 grounds</u>.

Once sighted, the ELWA 2 premises were prepared for the erection of the ETUs. In order to do so, the area had to be cleared from weeds and debris by hand, levelled by heavy machinery, and graded with aggregate concrete. The area was already surrounded by concrete walls. Nevertheless, fencing was installed in order to allow for a better regulation of patients' and staff's paths. Moreover, the sewage drainage had to be cleared, the water pipe repaired and prolonged, and generators for electricity purchased, transported, and installed.

¹ The two German partners are: "action medeor", a German NGO, and "Else-Kröner-Fresenius Stiftung", a German foundation, both settled in the medical sphere.

 $^{^2}$ GerLib Clinic is a well-established private hospital in Monrovia, Liberia, created as German-Liberian private initiative.



All materials for the preparation of the premises had to be purchased in Monrovia; the heavy machinery organized. Due to several construction sites across the city and a meanwhile collapsing economy, it was a rather complicated task to find reliable partners that were available immediately. Further tasks were to purchase a suitable truck for GerLib in order to support the ETU, as well as the relief of consignments (including the tents) from customs and the transport from Roberts International Airport to the ELWA compound. Nevertheless, the preparations were finished a day before all ETU equipment arrived on-site.



Figure 2. The levelled ground where the ETUs were to be installed. (Picture: I.S.A.R. Germany)

I.S.A.R. Germany's last task was to erect the ETUs with a technician and local staff and hand it over functionally. The erection of the tents – including its interiors – took two days in total, but included a training of local staff on how to dismantle and build up this tents for future scenarios. On 29 September 2015, the I.S.A.R. Germany team handed over the equipped ETUs. Further training of medical staff was conducted by MoH in the upcoming days in order to be operational.

Location

The ETU location was determined to be next to ELWA 2, thereby expanding its capacities. ELWA defines a long-established complex in midst of Monrovia, including a functional hospital. Since the international media interest in the Ebola crisis, ELWA 3 is most known for the ETU established and run by MSF. ELWA 2 describes the ETU established and run by the MoH next to ELWA hospital, with a total capacity today of 100 beds. The capacity was doubled by the efforts of I.S.A.R. Germany and its partners, as the ETUs were erected next to the existing compound.

"ELWA 2" as existing ETU received its water and electricity supplies from the ELWA community (as did ELWA 3). The newly established ETUs from I.S.A.R. Germany and its partners, offered and included the necessary infrastructure to not further exploit the ELWA electricity assets. The water supply was offered by the community.





Figure 3 (left): ELWA 2, existing ETU run by the MoH. The I.S.A.R. Germany ETU was established right next to the existing compound. Figure 4 (right): The location for the ETUs. (Pictures by I.S.A.R. Germany).

The sewage drainage was cleared in order for the premises to be used afterwards. The ETUs itself contain a system, were any kind of liquids and waste were to be disposed in the incinerator that belongs to the standard equipment of the ETU. Especially, in an environment dealing with a severe viral infection, this helps to minimize the further spread of the virus.

Core Data		
Mission's Personnel	Time Period of Mission	Mission's Duration
3 PAX (Management, Logistics, Medical)	17-30 September 2014	14 days
Volume of Relief Efforts	Location	Type of Mission
2 ETUs with a total capacity of 44 beds Medical relief goods for GerLib and ETU	Monrovia, Liberia	Coordinative, logistic

Benefit in the overall context of the Ebola crisis

The predominant benefit of the project at hand in the broader context of the Ebola crisis preexists in the ratio of efforts and effects. At a time, where the grand-scale international relief by governments and the international community was only initiated, a three-man crew enabled the local medical staff to sustainably and effectively increase their local efforts in the combat against Ebola. The time frame, the required human resources, as well as the costs remain marginal with regards to the strengthening of the existing efforts that occurred. Following the concept of "help to self-help", I.S.A.R. Germany and its partners consider the project at hand as the right answer to a variety of challenges at the right time.

The most important benefit from a humanitarian's perspective is the quality of treatment that was offered by the new ETUs in ELWA 2. Not only did the increased capacity enable the local staff to better provide for the patients, both the working and recovery conditions were increased dramatically. The ETUs are air-conditioned. While this characteristic was criticized

by some, I.S.A.R. Germany and its partners strongly persisted on the functionality of the airconditioning. Not only is the medical work in inherent protection exhausting with 40 degree

Celsius temperatures, but it drains the medical staff's efforts and will in an already weary environment. Moreover the air-conditioned atmosphere does strengthen the recovery of patients with a severe and acute hemorrhagic fever such as Ebola. Especially, since the treatment of Ebola itself only combats the symptoms. To overcome the virus, the patients have to fight severely. With a hampered will to live due to devastating surroundings, additional heat, and a lack of contact to one's relatives, the chances for recovery shrink further. Thus, the ETU in the project at hand allowed for air-conditioned treatment, an increased privacy to each patient, as well as the opportunity to communicate to one's relative via cell phone. Each bed is provided for with a curtain and an electricity plug, so that the patient can recharge their phone. The electricity demand of both the cell phone charging and the air conditioning were calculated in the generators' capacities.

Sustainability

The project embraces the sustainability aspect. First, the treatment of patients was conducted by MoH staff that was available and functioning. Thus, no substitute was erected that eventually conflicts with local institutions. For ELWA 2, this proceeding was suitable. Second, the treatment units can and are to be reused in future epidemics. Unfortunately, Liberia suffers cholera epidemics each year and faces different severe infection diseases throughout the country. The treatment tents and their equipment are mobile in a sense, that they can be dismantled, repacked, and erected anywhere where they are needed. The local staff has been trained to dismantle, pack, and build the units. Third, the levelling and preparation of the ground can be of use to the existing structure at ELWA hospital, if desired.

For further question, do not hesitate to contact:

I.S.A.R. Germany Stiftung gemeinnützige UG (haftungsbeschränkt)

Baldusstraße 13 D-47138 Duisburg

Office in Kleve (Please use for postal services!)

Boschstraße 16 D-47533 Kleve

Phone: +49 203 98 63 00 0 Email: info@isar-germany.de