

**Emergency Service
of Private and Public Rescue Services in Namibia
Study Report**

2015

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Preamble

While it belongs in countries like Germany, the Netherlands, England and France to the everyday life that a rescue service with appropriately trained and equipped staff arrives after not later than 15 minutes at the place of an emergency, this is not the case in Namibia. Here it belongs to the everyday life that the rescue service needs one hour until arrival. Also the rescue forces must handle situations with one or two ambulances which would have demanded a large-scale operation in Germany.

The idea of the work arose by my first visit in Namibia in 2011. After several foreign stays, among others in different mega cities, and a constant interest in the topic, I thought it would be exceptionally interesting how a rescue care is managed in a country with such a low population density.

The work, particularly the research on the spot, was possible by the quite Namibia-typical helpfulness and high interlinking of the involved people. So the numerous persons which I have won for the time as friends have supported me by the execution and have contributed to the fact that the work was possible in the extent how it is present now.

My first thank is to Fabian Martens and ATA International Training Namibia. Without the experienced support the work would have so, as it was executed, not possible. If it is concerning the research subject and the setting of important connections with the institutions or the providing of an accommodation, heartfelt thanks go to Fabian.

Farther I thank Mrs. Professor Dr. Frauke Kraas who has opened the possibility for me with her trust into this work. Besides, I thank for her care and her interest in the progress of the research.

I owe a warm thank you Mr. Professor Dr. Josef Nipper who has agreed to take care of the work as a second examiner.

Particularly I would like to thank Arthur Pearce, Elise Shikongo, Dirk Cloete, Charles Pearce († 19.04.2015), Albert Haese, Dr. Mathias Ritter and a lot of other which have stood by me with support.

Mine deepest and warmest thanks are considered to the people who have never lost the trust in me and have supported me during the two and a half years of the work, my girlfriend Sabrina Dittrich, to my parents and my colleagues, comrades and friends.

*„Aut viam inveniam aut faciam!”
(Hannibal Barkas 218 v. Chr.)*

(„I find a way or I build one!”)

Hannibal's reaction to the announcement, one can not overcome the Alps with elephants)

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Fold up map binder

List of abbreviations

ALS	Advanced Life Support
BLS	Basic Life Support
COW	City of Windhoek
ECT	Emergency Care Technician
ILS	Intermediate Life Support
MOHSS	Ministry of Health and Social Services
MVAF	Motor Vehicle Accident Fund
NDF	National Defense Force
PON	Polytechnic of Namibia
PSEMAS	Public Service Employee Medical Aid Scheme

I Introduction and target setting

The aim of a rescue service system is to reduce the mortality with appearing medical emergencies or critical situations. Such emergencies can for example be traumata in consequence of road accidents as well as other medical emergencies.

In Namibia 2.11 million people (NSA 2013) live on approx. 824.000 kms². The spatial distribution is very different and corresponds in the average to 2.5 inhabitants per km². Challenges arise from that in principle for an efficient health care system, particularly in the field of the rescue services and their structures.

Near the low population density the big distances put own claims to an adequate emergency care (SIKKA & MARGOLIS 2005). The financial possibilities are defeated by the expenses-intense maintenance of the forces. Expenses must be put down on public side on few taxpayers (GUSTAFSSON-WRIGHT et al. 2009, MESSELKEN & SCHLECHTRIEMEN 2003), while on private side the rescue services are shaped by market-economy demands.

Concerning the Namibian settlement history the existing rescue service system is adapted to two spaces. Here few densely populated areas stand towards thinly populated rural and desert like regions. The aim of the rescue service system is to always be able to guarantee a rapid and adequate care within an emergency.

Beside the evaluations of the rescue service of the Ministry of Health and Social service (MOHSS) from the year 2008 and a short study from the year 2010 from Synergos no examinations or comparable are present for rescue service systems in Namibia.

The preparation of a Namibia-specific research with the aim to describe the emergency care of the country by private and public rescue services is worthwhile therefore. Geography can perform here a special contribution, because it can treat spatial and social aspects as well as their cooperation with numerous other factors in the examined field.

Study traget

From the nature-spatial circumstances of Namibia, the existing and in it attached infrastructure follow different aspects which must be examined concerning a first care and accessibility of patients within an emergency. The following questions were used in the approach of the work for the containment of aim-leading research questions and enabled in the other working course to hold the research process in the aimed frame. They made

it possible to get a picture of the current situation found on the spot of the rescue service system and to consider different points of view.

So the question for the **What** first of all focused on the what happened and for example how severe the injuries of the patient care.

The question for the **Where** is particularly important in Namibia, because it causes directly the accessibility of the patient. Therefore, the road conditions to be found must be focused, in this connection, not only urban but also rural areas are important.

The temporal classification takes place by the **When** question. In this connection the day or nighttime and during which day, workday, holiday or preholiday, just like the season is of interest. This can have effects on the behavior of animals, the weather as well as persons.

Who is involved in the events takes also a central position. In this connection, the rescuers as well as the to be saved play an important role. On sides of the rescuers the education and equipment are important. In case of the patients the question is about Namibians or about foreigners for example, or if they are farmers, town-dwellers or nomadic population parts, because this contains inevitably consequences for the choice of a rescue service. New and additional rescue scenarios can arise as a result of the growing tourism. Persons move in the country which are not familiar with specific risks and dangers and are not prepared in their behavior.

The question after **How** should bring out how efficiently and effectively is reacted. In addition the involved command centers which are responsible for the coordination should be considered, as well as which rescue forces serve the emergency.

This consideration surpasses the bare creating of basics. Therefore the strength and weaknesses of the system are identified and potentials are disclosed to develop the system. With regard to the weakness it is a matter of working out possible minimization possibilities. This flows in a recommendation with specific suggestions and assistances to reach an appropriate location and allocation to offer attempts to an effective coordination.

Research questions

To be able to consider purposefully the emergency care by private and public rescue services as a component of the health care system, three research questions were developed which define the research under inclusion of the relevant participants and circumstances in Namibia:

- How did it come to the form of the current system and which rescue services and institutions were or are system-forming, and which role does the government play?

This first question should be answered in essence with the use of the policy cycle and the policy network. From here should be found out how far it is with the current system about a planned system design or an uncontrolled development. Aim is to be able to meet a statement with regard to a lacking control or a required loosening of the system. To understand the emergency care completely and to be able to explain it, a theoretical consideration of the policy field is not sufficient. Therefore, the involved rescue services and their practical actions are a central aspect of the work. Other participants, like the civilian population, are not considered specially, but are pulled up to the examination of the rescue service system, and how they have affected the development. Therefore the consideration of the rescue services leads under inclusion of the environmental factors like the population and topography of Namibia to the second research question:

- Which role do Namibia's specifications play as a sparsely populated country with strong socio economic mismatches also concerning location and allocation of the rescue services?

Among other things the research question refers to transportation kind and transportation time as a key factor for the efficiency of a rescue service system, because these are determined by the location. The latter is caused by population density and socio economic aspects of the population. Different rescue service operators act with different capital possibilities and can thereby provide divergent performances concerning the education as well as the equipment of their applied forces. Different communities can develop different images about how a rescue service should function and for what a rescue service is actually demanded.

From that the rescue services establish business routines and structures. For the nearer consideration of the services, the resources and possibilities of the separate services must be examined particularly also concerning discrepancies. A consideration of the applied command center structure and efficiency of the rescue forces is included in that:

- How effectively do public and private rescue services act in case of an emergency and why are there differences?

Placement of the study report

The present study report is a summary of the contents and relations of the dissertation of ISKAM (2015). Besides, particularly the theoretical and conceptual considerations as well as basic knowledge were excluded or were strongly shortened in relation to the original dissertation. With this action a summary good for the user is reached. For other and deeper going information the original of the thesis can be consulted.

To tackle the lack of own methods in the policy field analysis around specific circumstances, existing social-scientific methods of an elevation of the relevant data were pulled up (BEHRENS 2009: 203, RIHOUX et al. 2006). The raised data of interviews,

participating observations and the mapping are on the basis of their temporal congruence and the existing linkage characteristics compare and supplement able. All other methods are combinable on the basis of the temporal connection as well as the thematic attachment. To collect usable data, the different qualitative and quantitative methods were executed during both field phases in the years 2013 and 2014 in Namibia. In the appendix II the used interviews and methods are listed in summary. A discussion and representation of the separate methods can be found in ISKAM (2015).

The "theoretical conceptual considerations of the policy field analysis" belong to the continuing information. In the policy field analysis the main point is put on meso- and microlevel, because so it is possible to examine structures and participants in combination (BLUM & SCHUBERT 2011: 84). The definition what is taken under the policy field can be supplied only by the scientific or the political participants. This considered field can be as well widespread, as well as highly special (BLUM & SCHUBERT 2011: 81). As an research subject the part within the policy field of the health service can be demanded in essence which is responsible for the care of the population in case of an emergency.

A representation of the emergency medical background with regard to historical development and specific procedures is also renounced in the present report to hold the focus purposefully on a representation of the essential results.

The chapter "relevant rescue services and institutions" is also not illustrated completely in the present report. The original section represented the institutions relevant on the spot and participants in a top down perspective. Here discussed rescue bases can all be found in the enclosed fold-up map.

II Rescue service specific procedures

In to this section information are stated which have the focus on the rescue operation at tactical and operational level in Namibia. As a thread the process of a rescue operation is used. This serves to designate the separate phases of the operation and to feature specific procedures. The phases are represented partly overlapping. This is founded with the fact that it is about a dynamic process, in that, according to number of the involved participants and institutions, processes can run off in parallel.

The section opens with a presentation of the results with regard to the rescue operation commanding systems. The following sections consider generalized the rescue operations. The separate results of the sections should be supplemented so far possibly not only on the bases of the statements in interviews, but also with the case studies how they were grasped with the participating observation and the interviews.

II.1 Emergency management system

In Namibia exists neither a standardized operation management system which integrates the forces of all rescue services and coordinates, nor any dispatching systems. Institutions with call centers and control rooms, and these institutions with which the crew of the ambulance takes emergency calls must be distinguished.

Call centers und control rooms

Executed projects like from Synergos (2010) to strengthen the operational level of the MOHSS remained unsuccessful. What is caused by lacking supervision of the project in combination with changing staff in the base (ExpInt 01.08.2013c). The project focused on the improvement of the times needed by ambulances of the MOHSS in Windhoek. In addition a camputer was handed over to the data processing and a whiteboard for the time collection of the operations (Synergos in 2010). However, nobody knew in 2013 how the data management should be done and the whiteboard was used to document the departure times of the busses and not the times of the ambulances (ExpInt 01.08.2013c).

In addition to the MOHSS control room in Windhoek the Motor Vehicle Accident Fund (MVAF), LifeLink and EMED24 are using call centers as an infrastructure to take emergencies and to dispatch forces (ExpInt 24.10.2013).

In the MVAF call center calls are accepted from general emergency calls like medical emergencies, cries for help in case of a breakdown up to motor vehicle accidents and, but rarer, burglaries. In case of reported drug offenses the police is also informed. Also