Search and rescue on the central Mediterranean migratory route

The work of Sea-Eye

Julian Sassenscheidt

Sea-Eye Medical Team

Introduction

Topics

- Migration across the Mediterranean
- Emergence of civilian sea rescue
- Sea-Eye
- Onshore Work
- Data acquisition

Migration across the Mediterranean

Migration across the Mediterranean

- Migration over the Mediterranean has occurred for thousands of years in all directions
- Thousands of crossings from the northern shore of Africa each year since the mid-1990s

Main routes

Western Mediterranean

Morocco and sometimes Algeria to Spain

Central Mediterranean

North Africa to Italy and Malta

Eastern Mediterranean

Turkey to Greece (and sometimes Cyprus and Bulgaria)

Main routes



Figure 1: Migratory routes

- Considered the most deadly migratory route
- > 22000 deaths and disappearances since 2014^a
- Many silent and unrecorded shipwrecks



Figure 2: Sinking rubber boat

^aIOM Missing Migrants Project

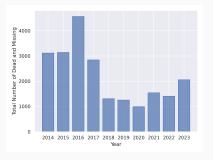


Figure 3: Dead and Missing (Data source: IOM Missing Migrants Project)

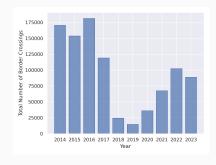


Figure 4: Arrivals (Data source: Frontex)



Figure 5: Rubber boat in the Mediterranean on July 23rd, 2017



Figure 6: Rubber boat in the Mediterranean on July 23rd, 2017

Mediterranean on Juli 25th, 2017

Emergence of civilian sea rescue

2013 Lampedusa shipwreck

October 3rd, 2013 Shipwreck with 366 victims close to the shore of Lampedusa



Figure 7: Coffins in Lampedusa



Figure 8: Wreck in 2014, 50 meters deep on seabed

2013 Lampedusa shipwreck



Figure 9: Headlines

Mare Nostrum

- October 18th, 2013: Italy launches Mare Nostrum
- Marine operation by Italian Navy and Italian Air Force
- At least 150000 migrants saved
- Expensive (~9 billion € per day)
- Lack of support from other EU countries
- Blamed as a pull factor



Figure 10: Source: Giorgio Perottino / Reuters

"Mare Nostrum" sei "Beihilfe zum Schlepperwesen" gewesen

Zugleich verteidigte der Minister trotz der dramatischen Flüchtlingsbilder auf dem Mittelmeer <u>das Ende der italienischen</u>

German Minister of Interior: "Mare Nostrum was aiding human trafficking"

furchtbare Boote gepackt und losgeschickt und wenig später die italienische Marine angerufen, sie möge sie retten. Das habe den Schleppern geholfen, Milliardengewinne zu erzielen.

Figure 11: Süddeutsche Zeitung

Mare Nostrum



Figure 12: IOM comment on the end of Mare Nostrum

End of Mare Nostrum - Begin of private SAR

- End of Mare Nostrum on October 31st, 2014
- Superseded by Frontex Operation Triton
- Aim of Triton: Border surveillance
- 2015 several NGOs started to perform SAR operations in the central Mediterranean (MOAS, Sea-Watch, Sea-Eye etc.)
- Sea-Eye was founded

NGO activity



Figure 13: NGO activity (Source: Civil MRCC)

Sea-Eye

Sea-Eye Vessels: SEA-EYE (2016-2018)



Figure 14: SEA-EYE

Sea-Eye Vessels: SEEFUCHS (2017-2018)



Figure 15: SEEFUCHS

Sea-Eye Vessels: ALAN KURDI (2018-2021)



Figure 16: ALAN KURDI

Sea-Eye Vessels: SEA-EYE 4 (2021-today)



Figure 17: SEA-EYE 4

Sea-Eye Vessels: SEA-EYE 4

SEA-EYE 4 tour

Onshore Work

SAR regions

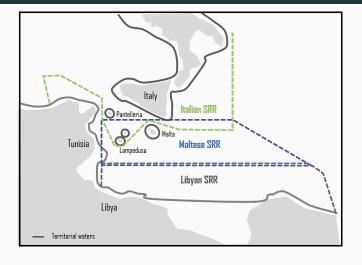


Figure 18: SAR regions (SRR) in the central Mediterranean

SAR zones



Figure 19: SAR zones 1 - 3

Search



Figure 20: Search from sunrise to sunset

Finding boats through...

- Sighting of a boat
- Coordinates from AlarmPhone
- Coordinates from civil planes

Process of Rescue

- First contact via RHIB
- Distribution of life vests
- Disembarkation to rescue ship by RHIB
- Now: Post Rescue Team (PRT)



Post rescue

Post rescue work & Data

- Number of children
- Number of pregnant women
- Nationalities
- Sometimes hundreds of rescued people
- Medical cases

Port of safety

- Allocation by rescue center
- POS often far away from SAR zone
- Detention and penalty fees

Medical cases

- Acute medical emergencies
- Fuel burns
- Hypotermia
- Exsiccosis / volume depletion
- Repetitive wound care (fuel burns)
- Organisation of medical evacuation
- [...]



Data acquisition

Medical documentation process



Figure 21: Medical Case Report

- Word template
- Only for patients who...
 - are critically ill
 - receive antibiotics

GNU Health

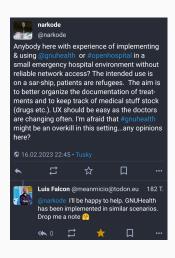


Figure 22: Mastodon

Medical Team needs

- Digitalisation
- Stock management
- Statistics

PRT / HOM needs

Integration of non-medical data

Data flow

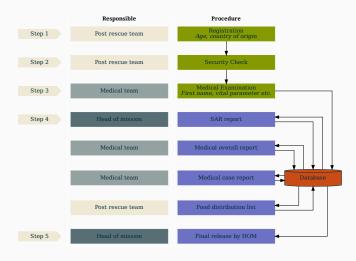


Figure 23: Post rescue data flow

Technical situation

- Hospital laptop
- Onboard server
- GNU Health running in VM on server
- No production use yet

Aim

- Wristband with QR-Code for every guest
- Organisation of non-medical information (People before Patients)
 - Number of guests onboard
 - Food distribution
 - Demographical data
 - [...]
- Medical information management
 - Medical data
 - Stock management
 - Torture and violence report
 - [...]

Thank You